900

(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 161 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..161 (D) OTHER INFORMATION: / Ceres Seq. ID 1576112 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3229: Met Ala Arg Ser Pro Ala Ala Ser Ser Ser Ser Tyr Thr Asp Ser Thr 10 Gly Ser Ser Ser Asp Ser Gly Ser Thr Ser Ser Gly Ile Asp Arg Arg 20 25 Arg His Glu Arg Glu Arg Arg Ser Ala Ser Asp Asp Ser Tyr 40 4.5 Ser Thr Ser Ser Tyr Asp Ser Asp Arg Glu Val Ser Gly Arg Ser Arg 55 60 Lys His Lys Lys Ser Ser Arg Ser Arg Lys Ser Arg Glu Arg Glu Arg 70 75 Ser Lys Asp Arg His His Lys Arg Asp Lys Ser Lys His Lys Glu Lys 85 90 Lys Glu Ser Glu His Ala Asp Gly Pro Val Gln Leu Ser Lys Phe Leu 100 105 110 Gly Arg Asp Lys Glu Lys Glu Glu Gly Thr Gln Arg Ser Ala Ile Ser 115 120 125 Gly Lys Lys Ile Met Met Lys Leu Glu Lys Thr Lys Glu Asp Lys Ala 130 135 140 Ala Glu Ser Lys Arg Asn Glu Leu Leu Lys Phe Leu Asn Ala Ser Tyr 145 150 155 Asp (2) INFORMATION FOR SEQ ID NO:3230: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 921 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..921 (D) OTHER INFORMATION: / Ceres Seq. ID 1576129 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3230: atttttagac gacaccecta cccgacccga tcggcgggag agcacgagac gccagcgcca 60 tecategegg caaaageega gaegaeeeag gaatetegge aeegtegeee eeetttetet 120 ctcgctcaaa agttgctgct ggagccctct cccctctctc cgaccaccaa ccatggatga 180 ggcgcaagtt gtggagtcaa aggatggaac catctcggtt gcttctgcat ttgctggtta 240 tcaggaagct gtgcaagaca gggatcacaa attcttgaca maagcagtgg aagaagcata 300 tegaggagte gattgeggtg aeggaggtee atteggagea gttgtegtet gtaatgaega 360 agTagtagtc agctgccata acatggttct gaagcacact gaccctactg cgcatgctga 420 agtaactgca attagagagg cttgcaaaaa gcttgggaaa attgagctct cagactgcga 480 aatttacgcg teetgegage catgeccaat gtgetttagt geagtteate tetecegaat 540 caagaggctg gtttatgggg ccaaggcaga ggctgccatc gccattggat ttgatgactt 600 cattgcagat gctctgagag gcactgggtt ctaccagaag gccaacttgg agatcaagaa 660 agctgacggc aatggtgcat tgatcgctga gcaagtcttt gaaaagacta aagagaagtt 720 ccagatgtac tgatgctgag cagaagagag atctcagatt tgtacaatgc ttactcataa 780 ggacaagaaa taatacagtg cccaaatgtc cattgtttcg ggaaaaaaaat ctcaattcca 840

ctgttcaaca ttttgatgat gcctgaattt cttgttaaca gacacaagat tgttatttgc

tgtaaaatgt gcagttgatg g

- (2) INFORMATION FOR SEQ ID NO:3231:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 243 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..243
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576130
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3231:

 Phe Leu Asp Asp Thr Pro Thr Arg Pro Asp Arg Glu Ser Thr Arg

 1 10 15

Arg Gln Arg His Pro Ser Arg Gln Lys Pro Arg Arg Pro Arg Asn Leu

Gly Thr Val Ala Pro Leu Ser Leu Ser Leu Lys Ser Cys Cys Trp Ser

35 40 45
Pro Leu Pro Ser Leu Arg Pro Pro Thr Met Asp Glu Ala Gln Val Val
50 55 60

Glu Ser Lys Asp Gly Thr Ile Ser Val Ala Ser Ala Phe Ala Gly Tyr
70 75 80

65 70 75 80

Gln Glu Ala Val Gln Asp Arg Asp His Lys Phe Leu Thr Xaa Ala Val

Glu Glu Ala Tyr Arg Gly Val Asp Cys Gly Asp Gly Gly Pro Phe Gly 100 105 110

Ala Val Val Cys Asn Asp Glu Val Val Val Ser Cys His Asn Met
115 120 125

Val Leu Lys His Thr Asp Pro Thr Ala His Ala Glu Val Thr Ala Ile 130 135 140

Arg Glu Ala Cys Lys Leu Gly Lys Ile Glu Leu Ser Asp Cys Glu
145 150 155 160

180 185 190

Ile Ala Ile Gly Phe Asp Asp Phe Ile Ala Asp Ala Leu Arg Gly Thr

195 200 205

Gly Phe Tyr Gln Lys Ala Asn Leu Glu Ile Lys Lys Ala Asp Gly Asn

210 215 220

Gly Ala Leu Ile Ala Glu Gln Val Phe Glu Lys Thr Lys Glu Lys Phe
225 230 235 240

Gln Met Tyr

- (2) INFORMATION FOR SEQ ID NO:3232:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 186 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..186
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576131
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3232:

Met Asp Glu Ala Gln Val Val Glu Ser Lys Asp Gly Thr Ile Ser Val
1 5 10 15

Ala Ser Ala Phe Ala Gly Tyr Gln Glu Ala Val Gln Asp Arg Asp His 20 25 30

Lys Phe Leu Thr Xaa Ala Val Glu Glu Ala Tyr Arg Gly Val Asp Cys

```
40
       35
Gly Asp Gly Gly Pro Phe Gly Ala Val Val Cys Asn Asp Glu Val
        55
                           60
Val Val Ser Cys His Asn Met Val Leu Lys His Thr Asp Pro Thr Ala
                  70
His Ala Glu Val Thr Ala Ile Arg Glu Ala Cys Lys Lys Leu Gly Lys
              85
                                 90
Ile Glu Leu Ser Asp Cys Glu Ile Tyr Ala Ser Cys Glu Pro Cys Pro
                             105 110
Met Cys Phe Ser Ala Val His Leu Ser Arg Ile Lys Arg Leu Val Tyr
                         120 125
Gly Ala Lys Ala Glu Ala Ala Ile Ala Ile Gly Phe Asp Asp Phe Ile
                     135 140
Ala Asp Ala Leu Arg Gly Thr Gly Phe Tyr Gln Lys Ala Asn Leu Glu
                 150 155
Ile Lys Lys Ala Asp Gly Asn Gly Ala Leu Ile Ala Glu Gln Val Phe
              165 170
Glu Lys Thr Lys Glu Lys Phe Gln Met Tyr
          180
(2) INFORMATION FOR SEQ ID NO:3233:
    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 455 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: single
         (D) TOPOLOGY: linear
   (ii) MOLECULE TYPE: DNA (genomic)
   (ix) FEATURE:
         (A) NAME/KEY: -
         (B) LOCATION: 1..455
         (D) OTHER INFORMATION: / Ceres Seq. ID 1576134
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3233:
aaatggatgg cattatgaac acggcctccg caagcatgtc catgtacgct taccttgctc
tecteaagee ecagggeaag atgateetge ttggeetgee tgagaageet etgeagatet
ccgccttctc tttggttact gggggcaaga ctctggccgg gagctgcatg gggagcatca
                                                                  240
gggacacgca ggagatgatg gacttcgcag ccaagcacgg gttgacagcg gacatcgaac
tgatcggcac cgaagaagtt aatgaggcca tggaacNgyc tcgccaaggg cgaggNtcag
                                                                  300
gtaccgcttc gtcatcgaca tcggcaacac catcagcgcg gcatcactag ggagctcgcc
ggtcccagct ctgtagctgc gacacttgtt cctgcttgga tatatcgtgc gataagcaag
tatatttgga ataaaaagga actcaattta aacgc
(2) INFORMATION FOR SEQ ID NO:3234:
     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 115 amino acids
         (B) TYPE: amino acid
         (C) STRANDEDNESS:
         (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
         (A) NAME/KEY: peptide
         (B) LOCATION: 1..115
         (D) OTHER INFORMATION: / Ceres Seq. ID 1576135
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3234:
Met Asp Gly Ile Met Asn Thr Ala Ser Ala Ser Met Ser Met Tyr Ala
                                  10
Tyr Leu Ala Leu Leu Lys Pro Gln Gly Lys Met Ile Leu Leu Gly Leu
                              25
Pro Glu Lys Pro Leu Gln Ile Ser Ala Phe Ser Leu Val Thr Gly Gly
                          40
Lys Thr Leu Ala Gly Ser Cys Met Gly Ser Ile Arg Asp Thr Gln Glu
                      55
```

Met Met Asp Phe Ala Ala Lys His Gly Leu Thr Ala Asp Ile Glu Leu

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
Ile Gly Thr Glu Glu Val Asn Glu Ala Met Glu Xaa Xaa Arg Gln Gly
                                    90
                85
Arg Xaa Ser Gly Thr Ala Ser Ser Ser Thr Ser Ala Thr Pro Ser Ala
                                                     110
                                105
            100
Arq His His
        115
(2) INFORMATION FOR SEQ ID NO:3235:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 111 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..111
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576137
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3235:
Met Asn Thr Ala Ser Ala Ser Met Ser Met Tyr Ala Tyr Leu Ala Leu
                                     10
                5
Leu Lys Pro Gln Gly Lys Met Ile Leu Leu Gly Leu Pro Glu Lys Pro
                                 25
Leu Gln Ile Ser Ala Phe Ser Leu Val Thr Gly Gly Lys Thr Leu Ala
                             40
Gly Ser Cys Met Gly Ser Ile Arg Asp Thr Gln Glu Met Met Asp Phe
                                             60
                         55
Ala Ala Lys His Gly Leu Thr Ala Asp Ile Glu Leu Ile Gly Thr Glu
                     70
                                         75
Glu Val Asn Glu Ala Met Glu Xaa Xaa Arg Gln Gly Arg Xaa Ser Gly
                                     90
Thr Ala Ser Ser Ser Thr Ser Ala Thr Pro Ser Ala Arg His His
                                                      110
                                 105
             100
 (2) INFORMATION FOR SEQ ID NO:3236:
      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 518 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: single
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: DNA (genomic)
     (ix) FEATURE:
           (A) NAME/KEY: -
           (B) LOCATION: 1..518
           (D) OTHER INFORMATION: / Ceres Seq. ID 1576138
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3236:
 aaacgcactc tcctatatcc gccgccatcg tctcgggctc tcatctctaa tcttcgggtt
 cgcgtcgcag tgtcttccgc ccgggctacc accatgccga agcagatcca cgagatcaag
 gactteetge tgactgegeg geggaaggae geaeggtegg tgeggateaa gegggeeaag
```

60 120 180 gacgccgtca agttcaaggt gcgctgctcc aggtacctct acaccctctg cgtccacgac 240 gccgacaagg ccaacaagct caagcagtcg ctcccgccag gtctgactgt ccaggagatt 300 taaggtatca agccacaaac tgtgcttttt ttgcggtgtc agggacgttt gctccagtgt 360 tactttagtt tgtaggtggg ctccattgct gtgtttgaat gaattatgaa gtttgagttt 420 gggatgcgaa tgatgtgtcg aacctatgag Gcctgtgttg taatggttac cccagaccgc 480 aaaggatggc aatctatcat aagttaaact gatttccq

- (2) INFORMATION FOR SEQ ID NO: 3237:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 amino acids (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

(A) NAME/KEY: peptide (B) LOCATION: 1..100 (D) OTHER INFORMATION: / Ceres Seq. ID 1576139 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3237: 5

Lys Arg Thr Leu Leu Tyr Pro Pro Pro Ser Ser Arg Ala Leu Ile Ser

10 Asn Leu Arg Val Arg Val Ala Val Ser Ser Ala Arg Ala Thr Thr Met 20 25

Pro Lys Gln Ile His Glu Ile Lys Asp Phe Leu Leu Thr Ala Arg Arg 40

Lys Asp Ala Arg Ser Val Arg Ile Lys Arg Ala Lys Asp Ala Val Lys 55 60 Phe Lys Val Arg Cys Ser Arg Tyr Leu Tyr Thr Leu Cys Val His Asp

70 75 Ala Asp Lys Ala Asn Lys Leu Lys Gln Ser Leu Pro Pro Gly Leu Thr 90

Val Gln Glu Ile

100

- (2) INFORMATION FOR SEQ ID NO:3238:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 69 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..69
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576140
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3238:

Met Pro Lys Gln Ile His Glu Ile Lys Asp Phe Leu Leu Thr Ala Arg 10 5

Arg Lys Asp Ala Arg Ser Val Arg Ile Lys Arg Ala Lys Asp Ala Val 20 25 30

Lys Phe Lys Val Arg Cys Ser Arg Tyr Leu Tyr Thr Leu Cys Val His 40 45

Asp Ala Asp Lys Ala Asn Lys Leu Lys Gln Ser Leu Pro Pro Gly Leu 55

Thr Val Gln Glu Ile

- (2) INFORMATION FOR SEQ ID NO:3239:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1034 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1034
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576144
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3239:

accaaagatg ttgccgtggc ctcgccgcac aagaaaatca cagcagtaca gcaccagaaa 60 cagaaaggta gtagatcaag gaacgccagt gcggcgacaa tgaccggcag tggaagcacg 120 180 ggcgccaatg gcaagagcca gagatccagg gccaaggcaa tgctgttcgc cttgggcaag agettteetg accaagttet geetcaggag aaggttgtgg agagetaeet ecaagaaage 240 agetgegacg atccegecac cagggecaag etteagegee tttgeaegae tacaacagtg 300 aagacaaggt acactgttat gtccaaggag ctattggata agcacccaga gctgaagatg gaGggtactc cgacactgac acctcgcctt gacatctgca atgccgcggt gatcgacctt 420 ggtgctgccg cagCtcgcgc tgcccttgac gaatggggtc gccctgcagc tgatattacc 480 caceteatet acateteate cagtgacett egteteceag ggggegacet teacetgget

gctcgccttg gccttagccc aaacaccgtg cgcacttccc ttctcttcct tggctgctcc 600 ggtggtgctg ctgccctccg cactgccaag gacattgctg agaacaatcc agggagccgt 660 720 gtcctagtaa cagctgctga gaccactgtg ctaggcttcc ggccaccaag ttatgaccgt ccttatgacc ttgttggtst gcgctgtttg gtgatggtgc atcagccgtg attataggag 780 caggtcccat gacaccagca gaaaatcctt tcttggagct tgagttctcc acgcaggagt 840 tectacetgg gaetgataag gtaattgatg geaaaatete agaggaagga attaatttta 900 aactagggcg tgatttgcct gagaagattg aaagccgcat agaaggtttc tgcaggactc 960 tcatgaacca ggtagggata aaggatttca acgatatatt ttgggctgtg catcctggtg gaccagcaat attg

- (2) INFORMATION FOR SEQ ID NO:3240:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 256 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

195

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..256
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576145 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3240: Thr Lys Asp Val Ala Val Ala Ser Pro His Lys Lys Ile Thr Ala Val 10 Gln His Gln Lys Gln Lys Gly Ser Arg Ser Arg Asn Ala Ser Ala Ala 25 Thr Met Thr Gly Ser Gly Ser Thr Gly Ala Asn Gly Lys Ser Gln Arg 45 40 Ser Arg Ala Lys Ala Met Leu Phe Ala Leu Gly Lys Ser Phe Pro Asp 60 55 Gln Val Leu Pro Gln Glu Lys Val Val Glu Ser Tyr Leu Gln Glu Ser 7.5 70 Ser Cys Asp Asp Pro Ala Thr Arg Ala Lys Leu Gln Arg Leu Cys Thr 90 Thr Thr Thr Val Lys Thr Arg Tyr Thr Val Met Ser Lys Glu Leu Leu 110 105 100 Asp Lys His Pro Glu Leu Lys Met Glu Gly Thr Pro Thr Leu Thr Pro 125 120 Arg Leu Asp Ile Cys Asn Ala Ala Val Ile Asp Leu Gly Ala Ala Ala 140 135 Ala Arg Ala Ala Leu Asp Glu Trp Gly Arg Pro Ala Ala Asp Ile Thr 155 150 His Leu Ile Tyr Ile Ser Ser Ser Asp Leu Arg Leu Pro Gly Gly Asp 165 170 Leu His Leu Ala Ala Arg Leu Gly Leu Ser Pro Asn Thr Val Arg Thr 185 190 180 Ser Leu Leu Phe Leu Gly Cys Ser Gly Gly Ala Ala Ala Leu Arg Thr

200

Ala Lys Asp Ile Ala Glu Asn Asn Pro Gly Ser Arg Val Leu Val Thr

215 Ala Ala Glu Thr Thr Val Leu Gly Phe Arg Pro Pro Ser Tyr Asp Arg

Pro Tyr Asp Leu Val Gly Xaa Arg Cys Leu Val Met Val His Gln Pro

205

220

235

250

- (2) INFORMATION FOR SEQ ID NO:3241:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..223
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576146
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3241: Met Thr Gly Ser Gly Ser Thr Gly Ala Asn Gly Lys Ser Gln Arg Ser 10 5 Arg Ala Lys Ala Met Leu Phe Ala Leu Gly Lys Ser Phe Pro Asp Gln 25 20 Val Leu Pro Gln Glu Lys Val Val Glu Ser Tyr Leu Gln Glu Ser Ser 40 Cys Asp Asp Pro Ala Thr Arg Ala Lys Leu Gln Arg Leu Cys Thr Thr 55 Thr Thr Val Lys Thr Arg Tyr Thr Val Met Ser Lys Glu Leu Leu Asp 75 7.0 Lys His Pro Glu Leu Lys Met Glu Gly Thr Pro Thr Leu Thr Pro Arg 90 85 Leu Asp Ile Cys Asn Ala Ala Val Ile Asp Leu Gly Ala Ala Ala Ala 105 110 Arg Ala Ala Leu Asp Glu Trp Gly Arg Pro Ala Ala Asp Ile Thr His 120 125 Leu Ile Tyr Ile Ser Ser Ser Asp Leu Arg Leu Pro Gly Gly Asp Leu 135 140 His Leu Ala Ala Arg Leu Gly Leu Ser Pro Asn Thr Val Arg Thr Ser 155 150 Leu Leu Phe Leu Gly Cys Ser Gly Gly Ala Ala Ala Leu Arg Thr Ala 170 165 Lys Asp Ile Ala Glu Asn Asn Pro Gly Ser Arg Val Leu Val Thr Ala 190 185

Ala Glu Thr Thr Val Leu Gly Phe Arg Pro Pro Ser Tyr Asp Arg Pro

- 200 205 Tyr Asp Leu Val Gly Xaa Arg Cys Leu Val Met Val His Gln Pro 215 210
- (2) INFORMATION FOR SEQ ID NO:3242:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 203 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..203
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576147
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3242: Met Leu Phe Ala Leu Gly Lys Ser Phe Pro Asp Gln Val Leu Pro Gln 10 Glu Lys Val Val Glu Ser Tyr Leu Gln Glu Ser Ser Cys Asp Asp Pro 30 25 Ala Thr Arg Ala Lys Leu Gln Arg Leu Cys Thr Thr Thr Val Lys 40 45 Thr Arg Tyr Thr Val Met Ser Lys Glu Leu Leu Asp Lys His Pro Glu
- 60 Leu Lys Met Glu Gly Thr Pro Thr Leu Thr Pro Arg Leu Asp Ile Cys
- 75 70 Asn Ala Ala Val Ile Asp Leu Gly Ala Ala Ala Ala Arg Ala Ala Leu 90
- Asp Glu Trp Gly Arg Pro Ala Ala Asp Ile Thr His Leu Ile Tyr Ile 105
- Ser Ser Ser Asp Leu Arg Leu Pro Gly Gly Asp Leu His Leu Ala Ala

- 195 200 (2) INFORMATION FOR SEQ ID NO:3243:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1107 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1107
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576155
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3243: 60 gagaganana ngcgargaar gavggagaga gcacgggggc ttgatcgaag atggatgccg gagcaaaggt ggtgaagaag gccgcggcgg ggcgtcgcgg cgggggcaag tacttcttcc 120 180 acqaqcaqat ttcaaqqcat cgcaccatca tgaatatctt tgacaaaacc cctcatgtgc 240 ataaagacgc atttgttgct ccaagtgcat cccttattgg tgatgttcaa gtcgggtcag 300 gagcttccat ttggtatggg tgcgtcttaa gaggggatgc aaacatcata caaattggat 360 ctgggaccaa tatacaagac aattctctta tacatgtggc taaatctaat ctaagtggga aggtctttcc aacaaccatt ggtaataacg tcacagtagg tcatagtgct gtgttacaag 420 480 gatgcacggt tgaggatgag gcttttgttg gcattggggc aaccctatta gatggtgttg 540 ttgttgaaaa gcacggaatg gtggcttgct ggagccctcg tacggcagaa tactaggatc 600 ccttgtggag aggtatgggg agggaaccCt gccaaatttc tgaggaagct cacagatgac 660 gagatcagtt tcattgcgga atcagctgcc aactattcca atctgtccaa ggtccatgct 720 gctgagaatg ccaaacctct tgaaaagatt gagtttgaga aggtgttggg caagaagttt 780 gctcaccagg atgagtatga ttcctcgatt ggcgtcactg aaggggcacc accagagctc acgtccccaa atccagccca atgaacctct gtttctgttt tctctttggc gccttaatca 840 ttttctgttg gacagtgctg gatcgttgat cggggtactg ttccatgaca ctggtggttt 900 atgtttactt ttcctcccca ataatcttgg atcgagcgat gttataaagc tggccatgca 960 cttcttccag attctgtatt cggtatgttt aagatgtgct ccctttcata acctcaagag 1020 tagttttage acceptecata ttegtcatga gttetgtact atgetttetg geeeggegtg tatgaaccat ctttataaaa atctctt
- (2) INFORMATION FOR SEQ ID NO: 3244:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 161 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..161
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576156
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3244:
- Met Asp Ala Gly Ala Lys Val Val Lys Lys Ala Ala Ala Gly Arg Arg 1 5 10 15
- Gly Gly Gly Lys Tyr Phe Phe His Glu Gln Ile Ser Arg His Arg Thr $20 \\ \hspace{1.5cm} 25 \\ \hspace{1.5cm} 30$
- Ile Met Asn Ile Phe Asp Lys Thr Pro His Val His Lys Asp Ala Phe 35 40 45 Val Ala Pro Ser Ala Ser Leu Ile Gly Asp Val Gln Val Gly Ser Gly

```
| Solution | Solution
```

- (2) INFORMATION FOR SEQ ID NO:3245:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 170 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..170
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576157
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3245:

Met Thr Arg Ser Val Ser Leu Arg Asn Gln Leu Pro Thr Ile Pro Ile 1 5 10 15

Cys Pro Arg Ser Met Leu Leu Arg Met Pro Asn Leu Leu Lys Arg Leu 20 25 30

Ser Leu Arg Arg Cys Trp Ala Arg Ser Leu Leu Thr Arg Met Ser Met $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Ile Pro Arg Leu Ala Ser Leu Lys Gly His His Gln Ser Ser Arg Pro
50 55 60

Gln Ile Gln Pro Asn Glu Pro Leu Phe Leu Phe Ser Leu Trp Arg Leu 65 70 75 80

Asn His Phe Leu Leu Asp Ser Ala Gly Ser Leu Ile Gly Val Leu Phe 85 90 95

His Asp Thr Gly Gly Leu Cys Leu Leu Phe Leu Pro Asn Asn Leu Gly
100 105 110

Ser Ser Asp Val Ile Lys Leu Ala Met His Phe Phe Gln Ile Leu Tyr \$115\$ \$120\$ \$125\$

Ser Val Cys Leu Arg Cys Ala Pro Phe His Asn Leu Lys Ser Ser Phe 130 135 140

Ser Thr Val His Ile Arg His Glu Phe Cys Thr Met Leu Ser Gly Pro 145 150 155 160

Ala Cys Met Asn His Leu Tyr Lys Asn Leu 165 170

- (2) INFORMATION FOR SEQ ID NO: 3246:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 150 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..150
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576158
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3246:

```
Met Leu Leu Arg Met Pro Asn Leu Leu Lys Arg Leu Ser Leu Arg Arg
                                    1.0
Cys Trp Ala Arg Ser Leu Leu Thr Arg Met Ser Met Ile Pro Arg Leu
                                25
            20
Ala Ser Leu Lys Gly His His Gln Ser Ser Arg Pro Gln Ile Gln Pro
                                                45
                            40
Asn Glu Pro Leu Phe Leu Phe Ser Leu Trp Arg Leu Asn His Phe Leu
                                            60
                        55
Leu Asp Ser Ala Gly Ser Leu Ile Gly Val Leu Phe His Asp Thr Gly
                    70
                                        75
Gly Leu Cys Leu Leu Phe Leu Pro Asn Asn Leu Gly Ser Ser Asp Val
                                    90
                8.5
Ile Lys Leu Ala Met His Phe Phe Gln Ile Leu Tyr Ser Val Cys Leu
                                                    110
                               105
            100
Arg Cys Ala Pro Phe His Asn Leu Lys Ser Ser Phe Ser Thr Val His
                        120
                                                125
Ile Arg His Glu Phe Cys Thr Met Leu Ser Gly Pro Ala Cys Met Asn
                                            140
                        135
His Leu Tyr Lys Asn Leu
                    150
```

- (2) INFORMATION FOR SEQ ID NO:3247:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 922 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..922
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576159
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3247: aaaactgttc tgcttcgctc gcrggcgctc atctccactc ctccgatggc gccgccaccc 60 accageceet catteeteeg eccgeegeeg etgecacace accegeacee tegecteett 120 ttgcgacctc cctccgcctc tttccgcgtc gccgaaatac tcggcggtcg gggcctctgc 180 aatggtgagg teggegteeg caaagaacte geateegget ceaceacete etegeeegeg 240 ccctctcctc ctccttcgac agattctcct ccgcccgcgg ttgatccgga cgcgttcgag 300 aaggagatga tgggcctcac aggcggcttc cctggcggtg aggtcggcct caaggacttc 360 gtagccaaga accegectee teccaagaaa teagaateee ageeccaage caegetetee 420 gegeegeege ggeegeegga getgeegetg ttettgeeeg geatggtggt getggteaag 480 aaccccaaca acgcctacca catgtactgc ggtatcgtgc agcgcgtcag CGacggcaag 540 gNtcgcggtg ctcttcgagg gaggagtgtg ggacaggctc atcaccttca acctcgacga 600 getegaggge agggagaagg gaccccetat ggccaacccc aagteegtgg tgetagagga 660 tettgtcgcg gagetcgagg atgacgatga tgataaggag gacgaagcgg ccaagaagaa 720 ggaaccggag ggcgcgggg cggcggcgac atgaccaggc ttcttgttcc tgttatacac 780 atcetetgta tgtatgeatg tatacagete aaataaaata tttggageta attaaaaagg 840 aacgataata taactcttat tatgaagtat atagtttgaa tgttagtgtg aattggggca 900 tggaagaatt gccatacgtt tg
- (2) INFORMATION FOR SEQ ID NO:3248:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 227 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..227
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576160
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3248:
- Lys Thr Val Leu Leu Arg Ser Xaa Ala Leu Ile Ser Thr Pro Pro Met

10 Ala Pro Pro Pro Thr Ser Pro Ser Phe Leu Arg Pro Pro Pro Leu Pro 20 25 His His Pro His Pro Arg Leu Leu Arg Pro Pro Ser Ala Ser Phe 40 Arg Val Ala Glu Ile Leu Gly Gly Arg Gly Leu Cys Asn Gly Glu Val 55 Gly Val Arg Lys Glu Leu Ala Ser Gly Ser Thr Thr Ser Ser Pro Ala 70 75 Pro Ser Pro Pro Pro Ser Thr Asp Ser Pro Pro Pro Ala Val Asp Pro 90 85 Asp Ala Phe Glu Lys Glu Met Met Gly Leu Thr Gly Gly Phe Pro Gly 100 105 Gly Glu Val Gly Leu Lys Asp Phe Val Ala Lys Asn Pro Pro Pro 115 120 125 Lys Lys Ser Glu Ser Gln Pro Gln Ala Thr Leu Ser Ala Pro Pro Arg 130 135 140 Pro Pro Glu Leu Pro Leu Phe Leu Pro Gly Met Val Val Leu Val Lys 145 150 155 Asn Pro Asn Asn Ala Tyr His Met Tyr Cys Gly Ile Val Gln Arg Val 165 170 175 Ser Asp Gly Lys Xaa Arg Gly Ala Leu Arg Gly Arg Ser Val Gly Gln 180 185 190 Ala His His Leu Gln Pro Arg Arg Ala Arg Gly Gln Gly Glu Gly Thr 195 200 Pro Tyr Gly Gln Pro Gln Val Arg Gly Ala Arg Gly Ser Cys Arg Gly 215 210 Ala Arg Gly 225

(2) INFORMATION FOR SEQ ID NO:3249:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 212 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..212
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576161
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3249:

Met Ala Pro Pro Pro Thr Ser Pro Ser Phe Leu Arg Pro Pro Pro Leu
1 5 10 15

Pro His His Pro His Pro Arg Leu Leu Arg Pro Pro Ser Ala Ser 20 25 30

Phe Arg Val Ala Glu Ile Leu Gly Gly Arg Gly Leu Cys Asn Gly Glu 35 40 45

Val Gly Val Arg Lys Glu Leu Ala Ser Gly Ser Thr Thr Ser Ser Pro
50 55 60

Ala Pro Ser Pro Pro Pro Ser Thr Asp Ser Pro Pro Pro Ala Val Asp 65 70 70 75 80 80 Pro Asp Ala Phe Glu Lys Glu Met Met Gly Leu Thr Gly Gly Phe Pro

Gly Gly Glu Val Gly Leu Lys Asp Phe Val Ala Lys Asn Pro Pro Pro 100 105 110

Pro Lys Lys Ser Glu Ser Gln Pro Gln Ala Thr Leu Ser Ala Pro Pro 115

Arg Pro Pro Glu Leu Pro Leu Phe Leu Pro Gly Met Val Val Leu Val
130 135 140

Lys Asn Pro Asn Asn Ala Tyr His Met Tyr Cys Gly Ile Val Gln Arg 145 150 155 160

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
Val Ser Asp Gly Lys Xaa Arg Gly Ala Leu Arg Gly Arg Ser Val Gly
                                     170
                165
Gln Ala His His Leu Gln Pro Arg Arg Ala Arg Gly Gln Gly Glu Gly
                                185
            180
Thr Pro Tyr Gly Gln Pro Gln Val Arg Gly Ala Arg Gly Ser Cys Arg
                            200
        195
Gly Ala Arg Gly
    210
(2) INFORMATION FOR SEQ ID NO:3250:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 125 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..125
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576162
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3250:
```

Met Met Gly Leu Thr Gly Gly Phe Pro Gly Gly Glu Val Gly Leu Lys 10 15 5 Asp Phe Val Ala Lys Asn Pro Pro Pro Pro Lys Lys Ser Glu Ser Gln 25 Pro Gln Ala Thr Leu Ser Ala Pro Pro Arg Pro Pro Glu Leu Pro Leu 45 40 Phe Leu Pro Gly Met Val Val Leu Val Lys Asn Pro Asn Asn Ala Tyr 60 55 His Met Tyr Cys Gly Ile Val Gln Arg Val Ser Asp Gly Lys Xaa Arg 75 70 Gly Ala Leu Arg Gly Arg Ser Val Gly Gln Ala His His Leu Gln Pro 90 Arg Arg Ala Arg Gly Gln Gly Glu Gly Thr Pro Tyr Gly Gln Pro Gln 105 Val Arg Gly Ala Arg Gly Ser Cys Arg Gly Ala Arg Gly 120 115

- (2) INFORMATION FOR SEQ ID NO:3251:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 627 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..627
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576221

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3251:

aaggtgtttt geeetettet tegegarene eecegeegea accegeagee geategggag 60 acccgcagcc gccgatggcg aagaagcaca gggacccagc ctctgargcc gcgagcggcg 120 acteccegge egegtecate egetecetet tetecgegga caaMccegtt eegeeggaag 180 geetetacgg aggageecce egegaeteet geaccegeea egaegeecet eeccatgeaa 240 cccagccgtg acgccaggga tgccgagccg tcctcgaaga agaataagaa gagcaaggag 300 gagggcccgc ggcgcaagcg gaagcgrgac gagttggagg ccggccggga gcggcggcga 360 ggcgcggaga atccgtcgag agttggggag aagaggaagg ctcccgacga cgcggcacag 420 ggggccgggg aggacgagga ggaggctttc gacgacgaga gcaagctgct caggaccgtg 480 ttcgtgggga acctgccgct gcggwccaag cgcaaggtgc tcatcaagga gttcgctcaa 540 aaaggacagg caggcagctg cctccccca tgttatgatg acaaaactct agtagctagg 600 aaaggaatca cggtgacctt ttgtttc

- (2) INFORMATION FOR SEQ ID NO:3252:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..209
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576222
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3252:

Lys Val Phe Cys Pro Leu Leu Arg Xaa Xaa Pro Arg Arg Asn Pro Gln $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Pro His Arg Glu Thr Arg Ser Arg Arg Trp Arg Arg Ser Thr Gly Thr $20 \\ 25 \\ 30$

Gln Pro Leu Xaa Pro Arg Ala Ala Thr Pro Arg Pro Arg Pro Ser Ala 35 40 45

Pro Ser Ser Pro Arg Thr Xaa Pro Phe Arg Arg Lys Ala Ser Thr Glu 50 55 60

Glu Pro Pro Ala Thr Pro Ala Pro Ala Thr Thr Pro Leu Pro Met Gln 65 70 75 80

Pro Ser Arg Asp Ala Arg Asp Ala Glu Pro Ser Ser Lys Lys Asn Lys 85 90 95

Lys Ser Lys Glu Glu Gly Pro Arg Arg Lys Arg Lys Xaa Asp Glu Leu 100 105 110

Giu Ala Gly Arg Glu Arg Arg Gly Ala Glu Asn Pro Ser Arg Val 115 120 125

Gly Glu Lys Arg Lys Ala Pro Asp Asp Ala Ala Gln Gly Ala Gly Glu 130 135 140

Asp Glu Glu Glu Ala Phe Asp Asp Glu Ser Lys Leu Leu Arg Thr Val
145 150 155 160

Phe Val Gly Asn Leu Pro Leu Arg Xaa Lys Arg Lys Val Leu Ile Lys $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$ Glu Phe Ala Gln Lys Gly Gln Ala Gly Ser Cys Leu Pro Pro Cys Tyr

180 185 190
Asp Asp Lys Thr Leu Val Ala Arg Lys Gly Ile Thr Val Thr Phe Cys
195 200 205

Dha

- (2) INFORMATION FOR SEQ ID NO:3253:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 131 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..131
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576223
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3253:

Met Gln Pro Ser Arg Asp Ala Arg Asp Ala Glu Pro Ser Ser Lys Lys 1 5 10 15

Asn Lys Lys Ser Lys Glu Glu Gly Pro Arg Arg Lys Arg Lys Xaa Asp 20 25 30

Glu Leu Glu Ala Gly Arg Glu Arg Arg Gly Ala Glu Asn Pro Ser 35 40 45

Arg Val Gly Glu Lys Arg Lys Ala Pro Asp Asp Ala Ala Gln Gly Ala 50 55 60

Gly Glu Asp Glu Glu Glu Ala Phe Asp Asp Glu Ser Lys Leu Leu Arg 65 70 75 80 Thr Val Phe Val Gly Asn Leu Pro Leu Arg Xaa Lys Arg Lys Val Leu

```
90
                                                         95
                85
Ile Lys Glu Phe Ala Gln Lys Gly Gln Ala Gly Ser Cys Leu Pro Pro
                                                    110
                               105
            100
Cys Tyr Asp Asp Lys Thr Leu Val Ala Arg Lys Gly Ile Thr Val Thr
                            120
        115
Phe Cys Phe
    130
(2) INFORMATION FOR SEQ ID NO:3254:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 110 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..110
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576224
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3254:
Met Pro Ser Arg Pro Arg Arg Arg Ile Arg Arg Ala Arg Arg Arg Ala
                                     10
                5
Arg Gly Ala Ser Gly Ser Xaa Thr Ser Trp Arg Pro Ala Gly Ser Gly
                                 25
            20
Gly Glu Ala Arg Arg Ile Arg Arg Glu Leu Gly Arg Arg Gly Arg Leu
                             40
Pro Thr Thr Arg His Arg Gly Pro Gly Arg Thr Arg Arg Arg Leu Ser
                        55
Thr Thr Arg Ala Ser Cys Ser Gly Pro Cys Ser Trp Gly Thr Cys Arg
                                         75
                    70
Cys Xaa Pro Ser Ala Arg Cys Ser Ser Arg Ser Ser Leu Lys Lys Asp
                                     90
Arg Gln Ala Ala Ala Ser Pro His Val Met Met Thr Lys Leu
                                 105
(2) INFORMATION FOR SEQ ID NO:3255:
      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 750 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: single
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: DNA (genomic)
     (ix) FEATURE:
           (A) NAME/KEY: -
           (B) LOCATION: 1..750
           (D) OTHER INFORMATION: / Ceres Seq. ID 1576229
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3255:
 gettecacea tegeacecae eeggagegee teetettete eagegteega teeceattee
                                                                         60
 ccacctetee teecteegee geageteee gemeeettet eteeceteet egeeteeeeg
                                                                        120
 cgcgcgcgtt tttataaggg tttaagcgga ggcgcccggt cgctggcgat ggccgamgac
                                                                        180
 ggcgggagcc acgagggcag cggcggcggc ggaggcgtcc gggagcagga ccggttcctg
                                                                        240
 cccatcgcca acatcagccg gatcatgaag aargCcgtcc cggccaacgg caagatcgcc
                                                                        300
 aaggacgcta aggagaccgc tgcaaaaccg agggtgctga aacagagatg attctggttt
                                                                        360
 ggcccgtaca agcgatgcaa aaggtcgtct cccaaggtaa cgacgaatga tggAcagcgg
                                                                        420
 gggtgctctt gctctctaca agttgatgac aactagctgg ttgcctttgg aaagcacccg
                                                                        480
 tgcatgtgat ctgacgaatg aaaacaaagt gatgggtgta aacgtgtaaa gactttaaac
                                                                        540
                                                                        600
 tggtgccaat aaatattacg tatttatgta aatgcacgga tctgatggaa tgcacatatg
                                                                        660
 gtgcccatca atctgggcat tgcgcgctgc cgaatgtctg gtaaagcgcg ctatttcatg
 gttgtgtgcg tccgagaaaa ggcaatggcc gtgcaaaagt ttcttcgacg gatggttgca
                                                                        720
 gatgttagca gtacaggatg ttttccttgt
 (2) INFORMATION FOR SEQ ID NO:3256:
```

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 116 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..116
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576230
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3256:

Ala Ser Thr Ile Ala Pro Thr Arg Ser Ala Ser Ser Ser Pro Ala Ser 1 5 10 15

Asp Pro His Ser Pro Pro Leu Leu Pro Pro Pro Pro Ala Pro Xaa Pro 20 25 30

Phe Ser Pro Leu Leu Ala Ser Pro Arg Ala Arg Phe Tyr Lys Gly Leu 35 40 45

Ser Gly Gly Ala Arg Ser Leu Ala Met Ala Xaa Asp Gly Gly Ser His 50 55 60

Glu Gly Ser Gly Gly Gly Gly Val Arg Glu Gln Asp Arg Phe Leu
70 75 80

Pro Ile Ala Asn Ile Ser Arg Ile Met Lys Xaa Ala Val Pro Ala Asn 85 90 95

Gly Lys Ile Ala Lys Asp Ala Lys Glu Thr Ala Ala Lys Pro Arg Val

Leu Lys Gln Arg 115

- (2) INFORMATION FOR SEQ ID NO:3257:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 60 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..60
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576231
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3257:

Met Ala Xaa Asp Gly Gly Ser His Glu Gly Ser Gly Gly Gly Gly 1 5 10 15

Val Arg Glu Gln Asp Arg Phe Leu Pro Ile Ala Asn Ile Ser Arg Ile 20 25 30

Met Lys Xaa Ala Val Pro Ala Asn Gly Lys Ile Ala Lys Asp Ala Lys 35 40 45

Glu Thr Ala Ala Lys Pro Arg Val Leu Lys Gln Arg
50 55 60

- (2) INFORMATION FOR SEQ ID NO:3258:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 59 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..59
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576232
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3258:

Met His Gly Ser Asp Gly Met His Ile Trp Cys Pro Ser Ile Trp Ala
1 10 15

Leu Arg Ala Ala Glu Cys Leu Val Lys Arg Ala Ile Ser Trp Leu Cys
20 25 30

Ala Ser Glu Lys Arg Gln Trp Pro Cys Lys Ser Phe Phe Asp Gly Trp 40

Leu Gln Met Leu Ala Val Gln Asp Val Phe Leu 55 50

- (2) INFORMATION FOR SEQ ID NO:3259:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 934 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..934
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576241
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3259: aaaaattgca aaaatetetg eegtgeetet egtetetett eteargegee aegeaaaaeg 60 gtctccgttt tccctctccg gatccggccc gcgggagcca ggagccatcg atgatccgga 120 180 cegeaacggt gegagegegt etectectat egegeteeta egtageacag geaaaggeag cttctcgctg gcctctcgtc cgctggaagg cttcgcatct tggatctgta cgctctttct 240 atcagatgga cattacaagg caatacaaaa ataaaatttt gactgcaaga gggtgccata 300 360 gctcccctga gagtcaagaa ttagcaatga aaagctgtgt tccatgcaac tctaaggatt taggtcccat gtcagaagat tctgctaaaa agttgcttga acaggtgaat ggttgggaac 420 tgatcactga aggtggtgtt ctgaaattac atagaacatg gaaggtgaag aactttgtta 480 aaggacttga gttctttcag cttgttgctG ctatcgctga ggaagaaggt caccatccag 540 atcttcatct tgttggttgg aataatgtga aaattgatgt ttggactcat tctgtcagag 600 gtttaacaag taatgatttc atccttgctg cgaagatcaa tcatctcact ttagacggca 660 ttataaggaa gaaagctaaa tagccaatgt ctcagaagca actcaaatat gcagctcgta 720 tttgtttgga attttgtatg cgcagcgatg gagaagccaa atgttgagga cacctcgccc 780 tgtgtgagat taacttgctg aaatgtagtg ccttattcag tagctcattt taccttgtta 840 ttaattagta atttgcatga gtagacgttg aatccatcat tgtacttggt tacctactta 900
- ccttacctgt cagttttgaa aagacacatg gtcg (2) INFORMATION FOR SEQ ID NO:3260:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 226 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

8.5

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..226
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576242
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3260:
- Lys Leu Gln Lys Ser Leu Pro Cys Leu Ser Ser Leu Phe Ser Xaa Ala 10 5 1
- Thr Gln Asn Gly Leu Arg Phe Pro Ser Pro Asp Pro Ala Arg Gly Ser 30 25 20
- Gln Glu Pro Ser Met Ile Arg Thr Ala Thr Val Arg Ala Arg Leu Leu 45 40
- Leu Ser Arg Ser Tyr Val Ala Gln Ala Lys Ala Ala Ser Arg Trp Pro 60 55 Leu Val Arg Trp Lys Ala Ser His Leu Gly Ser Val Arg Ser Phe Tyr
- 75 70 Gln Met Asp Ile Thr Arg Gln Tyr Lys Asn Lys Ile Leu Thr Ala Arg 95
- Gly Cys His Ser Ser Pro Glu Ser Gln Glu Leu Ala Met Lys Ser Cys 110 105 100

- Val Pro Cys Asn Ser Lys Asp Leu Gly Pro Met Ser Glu Asp Ser Ala 125 120 115
- Lys Lys Leu Leu Glu Gln Val Asn Gly Trp Glu Leu Ile Thr Glu Gly

135 130 Gly Val Leu Lys Leu His Arg Thr Trp Lys Val Lys Asn Phe Val Lys 145 150 155 160 Gly Leu Glu Phe Phe Gln Leu Val Ala Ala Ile Ala Glu Glu Gly 170 165 His His Pro Asp Leu His Leu Val Gly Trp Asn Asn Val Lys Ile Asp 180 185 Val Trp Thr His Ser Val Arg Gly Leu Thr Ser Asn Asp Phe Ile Leu 195 200 205 Ala Ala Lys Ile Asn His Leu Thr Leu Asp Gly Ile Ile Arg Lys Lys 215 220 Ala Lys 225 (2) INFORMATION FOR SEQ ID NO:3261: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 190 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..190 (D) OTHER INFORMATION: / Ceres Seq. ID 1576243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3261: Met Ile Arg Thr Ala Thr Val Arg Ala Arg Leu Leu Ser Arg Ser 10 Tyr Val Ala Gln Ala Lys Ala Ala Ser Arg Trp Pro Leu Val Arg Trp 20 25 Lys Ala Ser His Leu Gly Ser Val Arg Ser Phe Tyr Gln Met Asp Ile 45 40 Thr Arg Gln Tyr Lys Asn Lys Ile Leu Thr Ala Arg Gly Cys His Ser 60 55 Ser Pro Glu Ser Gln Glu Leu Ala Met Lys Ser Cys Val Pro Cys Asn 75 70 Ser Lys Asp Leu Gly Pro Met Ser Glu Asp Ser Ala Lys Lys Leu Leu 85 90 Glu Gln Val Asn Gly Trp Glu Leu Ile Thr Glu Gly Gly Val Leu Lys 100 105 Leu His Arg Thr Trp Lys Val Lys Asn Phe Val Lys Gly Leu Glu Phe 120 125 Phe Gln Leu Val Ala Ala Ile Ala Glu Glu Glu Gly His His Pro Asp 135 140 Leu His Leu Val Gly Trp Asn Asn Val Lys Ile Asp Val Trp Thr His 150 155 Ser Val Arg Gly Leu Thr Ser Asn Asp Phe Ile Leu Ala Ala Lys Ile 165 170 Asn His Leu Thr Leu Asp Gly Ile Ile Arg Lys Lys Ala Lys 185 180 (2) INFORMATION FOR SEQ ID NO:3262: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 145 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..145

(D) OTHER INFORMATION: / Ceres Seq. ID 1576244

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3262:

60 120

180

240

300

360

420

540

600

660

```
Met Asp Ile Thr Arg Gln Tyr Lys Asn Lys Ile Leu Thr Ala Arg Gly
                                   10
Cys His Ser Ser Pro Glu Ser Gln Glu Leu Ala Met Lys Ser Cys Val
                               25
           2.0
Pro Cys Asn Ser Lys Asp Leu Gly Pro Met Ser Glu Asp Ser Ala Lys
                           40
Lys Leu Leu Glu Gln Val Asn Gly Trp Glu Leu Ile Thr Glu Gly Gly
                                           60
                       55
Val Leu Lys Leu His Arg Thr Trp Lys Val Lys Asn Phe Val Lys Gly
                                       75
                   70
Leu Glu Phe Phe Gln Leu Val Ala Ala Ile Ala Glu Glu Gly His
                                   90
                                                       95
                85
His Pro Asp Leu His Leu Val Gly Trp Asn Asn Val Lys Ile Asp Val
                                                   110
                               105
Trp Thr His Ser Val Arg Gly Leu Thr Ser Asn Asp Phe Ile Leu Ala
                                              125
                          120
Ala Lys Ile Asn His Leu Thr Leu Asp Gly Ile Ile Arg Lys Lys Ala
                        135
    130
Lys
```

145

- (2) INFORMATION FOR SEQ ID NO:3263:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 698 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..698
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576245
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3263: aaagaaaagg aaggaagaag ggcctcctgt atcctctcac ttccctcagt cctcgtccgt ctgctccctc ctctckctas ctagctctag ctagccttcc tgtagcgcgg cagagatggc tgcccctgcc tccaccacgg cggcggcggc ggcagcgctg ctgctgctgc tcctcctgtc getegeegeg geggeggnae atgtegateg tgteetaegg ggagegeage breraggagg cgcggcggat gtacgcggag tggatggcgg cgcacggccg gacctacaam gccgtcggcK aggaggageg geggtaceag gtgtteeggg acaaceteeg etacategae gegeacaaeg ccgccgccga cgcgggcgtc cactccttcc gcctcgAgcc tcaaccgCtt cgccgacctc

accaacgacg agtaccgcgc cacctacctc ggcgccagga ccaggccgca gagggagagg 480 aagctcggcg ccaggtacca cgccgccgac aacgaggacc tgccggagtc cgtcgactgg agggccaagg gegeegtege egaggtcaag gaccagggca getgegggag etgttggget ttctcaacaa tagcagctgt ggaaggcatc aaccagattg ttacaggcga cttgatctcc ttgtctgaac aagagcttgt cgactgtgac mytcgtac

- (2) INFORMATION FOR SEQ ID NO:3264:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 221 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..221
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576246
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3264:
- Arg Lys Gly Arg Lys Lys Gly Leu Leu Tyr Pro Leu Thr Ser Leu Ser 10 5
- Pro Arg Pro Ser Ala Pro Ser Ser Xaa Xaa Leu Ala Leu Ala Ser Leu 30 25 20
- Pro Val Ala Arg Gln Arg Trp Leu Pro Leu Pro Pro Pro Arg Arg Arg

40 35 Arg Arg Gln Arg Cys Cys Cys Ser Ser Cys Arg Ser Pro Arg Arg 55 Arg Xaa Met Ser Ile Val Ser Tyr Gly Glu Arg Ser Xaa Xaa Glu Ala 70 Arg Arg Met Tyr Ala Glu Trp Met Ala Ala His Gly Arg Thr Tyr Xaa 90 85 Ala Val Gly Xaa Glu Glu Arg Arg Tyr Gln Val Phe Arg Asp Asn Leu 100 105 Arg Tyr Ile Asp Ala His Asn Ala Ala Ala Asp Ala Gly Val His Ser 115 120 125 Phe Arg Leu Glu Pro Gln Pro Leu Arg Arg Pro His Gln Arg Arg Val 130 135 140 Pro Arg His Leu Pro Arg Arg Gln Asp Gln Ala Ala Glu Gly Glu Glu 145 150 155 Ala Arg Arg Gln Val Pro Arg Arg Gln Arg Gly Pro Ala Gly Val 165 170 Arg Arg Leu Glu Gly Gln Gly Arg Arg Arg Gly Gln Gly Pro Gly 180 185 Gln Leu Arg Glu Leu Leu Gly Phe Leu Asn Asn Ser Ser Cys Gly Arg 195 200 205 His Gln Pro Asp Cys Tyr Arg Arg Leu Asp Leu Leu Val 215 220 (2) INFORMATION FOR SEQ ID NO:3265:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 165 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..165
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576247
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3265:
- Met Ala Ala Pro Ala Ser Thr Thr Ala Ala Ala Ala Ala Leu Leu 10
- Leu Leu Leu Leu Ser Leu Ala Ala Ala Xaa His Val Asp Arg 25 20
- Val Leu Arg Gly Ala Gln Xaa Xaa Gly Gly Ala Ala Asp Val Arg Gly
- Val Asp Gly Gly Ala Arg Pro Asp Leu Gln Xaa Arg Arg Xaa Gly Gly 60
- Ala Ala Val Pro Gly Val Pro Gly Gln Pro Pro Leu His Arg Arg Ala 75 Gln Arg Arg Arg Arg Gly Arg Pro Leu Leu Pro Pro Arg Ala Ser
- 90 85 Thr Ala Ser Pro Thr Ser Pro Thr Thr Ser Thr Ala Pro Pro Thr Ser
- 105 110 100 Ala Pro Gly Pro Gly Arg Arg Gly Arg Gly Ser Ser Ala Pro Gly Thr 120 125
- 115 Thr Pro Pro Thr Thr Arg Thr Cys Arg Ser Pro Ser Thr Gly Gly Pro 140 135
- Arg Ala Pro Ser Pro Arg Ser Arg Thr Arg Ala Ala Gly Ala Val 155
- Gly Leu Ser Gln Gln

- (2) INFORMATION FOR SEQ ID NO:3266:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 155 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..155
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576248
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3266:

Met Ser Ile Val Ser Tyr Gly Glu Arg Ser Xaa Xaa Glu Ala Arg Arg 1 5 10 15

Met Tyr Ala Glu Trp Met Ala Ala His Gly Arg Thr Tyr Xaa Ala Val 20 25 30

Gly Xaa Glu Glu Arg Arg Tyr Gln Val Phe Arg Asp Asn Leu Arg Tyr 35 40 45

Ile Asp Ala His Asn Ala Ala Ala Asp Ala Gly Val His Ser Phe Arg 50 55 60

Leu Glu Pro Gln Pro Leu Arg Arg Pro His Gln Arg Arg Val Pro Arg 65 70 75 80

His Leu Pro Arg Arg Gln Asp Gln Ala Ala Glu Gly Glu Glu Ala Arg 85 90 95

Arg Gln Val Pro Arg Arg Arg Gln Arg Gly Pro Ala Gly Val Arg Arg 100 105 110

Leu Glu Gly Gln Gly Arg Arg Arg Gly Gln Gly Pro Gly Gln Leu
115 120 125

Arg Glu Leu Leu Gly Phe Leu Asn Asn Ser Ser Cys Gly Arg His Gln
130 135 140

Pro Asp Cys Tyr Arg Arg Leu Asp Leu Leu Val 145 150 155

- (2) INFORMATION FOR SEQ ID NO: 3267:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 988 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..988
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576267
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3267:

cgatagtatg ctaggaagga gagaaaatcc aggggagcat gaagcgatgc gcaagatgaa 60 120 gaatgaatti atggtaaatt gggatgggtt gcgcactaaa gataaggagc gtgtgcttgt tettggtget acaaatagge ettttgacet egacgagget gtgattagga ggtteeceeg 180 caggitaatg gtaaactigc ccgatgcatc aaatagggag aaaattctaa aagtaatttt 240 ggcaaaagaa gagctgggat ctgatgttga tatggactcg cttgccaata tgactgatgg 300 ttattcagga agcgacctga agaatctgtg tgtvaccgcg gcgcattacc ccatccgaga 360 aattctggag aaggaaaaga aggagaagag tttggctaaa acagaaggta ggccggagcc 420 tgcattatat ggaagcgagG acatccgccc ccttagcata gatgacttca aaAtctgccm 480 atgagcaggt gtgtgcgasc gtttcgtccg actcggcgaa catgaacgag ctccttcaat 540 ggaacgacyt gtacgktgaa ggcgggtcaa ggaagaagaa agcgctgagc tacttcatgt 600 gatgtggtga gagcatagaa tccagaagga tcacagccgt ggcataagat cagaaggaac 660 acagagegge catagtacca caccacace cactatggee ctaaatccag teaggtitte 720 780 getcettece ceteceteag tageegeege egeceeaceg eegeetggtg taattagaac 840 tgtgtaccga gtcgagttgg tttgccagct gtttcgaggt tacagagttg agatttggaa ttacaatggc gccattgccc tcctccaacc ccccttttt cttcctctca taagttgcgg 900 tcactgtcct tcttggactc tctggccttt gttcttgtaa atgcgaaatg aagggatgtg 960

- aaataagaac atcttcgtcc tgttgttg
 (2) INFORMATION FOR SEQ ID NO:3268:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 160 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..160
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576268
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3268:
- Asp Ser Met Leu Gly Arg Arg Glu Asn Pro Gly Glu His Glu Ala Met 1 5 10 15
- Arg Lys Met Lys Asn Glu Phe Met Val Asn Trp Asp Gly Leu Arg Thr 20 25 30
- Lys Asp Lys Glu Arg Val Leu Val Leu Gly Ala Thr Asn Arg Pro Phe 35 40 45
- Asp Leu Asp Glu Ala Val Ile Arg Arg Phe Pro Arg Arg Leu Met Val 50 55 60
- Asn Leu Pro Asp Ala Ser Asn Arg Glu Lys Ile Leu Lys Val Ile Leu 65 70 75 80
- Ala Lys Glu Glu Leu Gly Ser Asp Val Asp Met Asp Ser Leu Ala Asn 85 90 95
- Met Thr Asp Gly Tyr Ser Gly Ser Asp Leu Lys Asn Leu Cys Xaa Thr 100 105 110
- Ala Ala His Tyr Pro Ile Arg Glu Ile Leu Glu Lys Glu Lys Glu
 115 120 125
- Lys Ser Leu Ala Lys Thr Glu Gly Arg Pro Glu Pro Ala Leu Tyr Gly 130 135 140
- (2) INFORMATION FOR SEQ ID NO:3269:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 158 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..158
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576269
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3269:
- Met Leu Gly Arg Arg Glu Asn Pro Gly Glu His Glu Ala Met Arg Lys

 1 5 10 15
- Met Lys Asn Glu Phe Met Val Asn Trp Asp Gly Leu Arg Thr Lys Asp 20 25 30
- Lys Glu Arg Val Leu Val Leu Gly Ala Thr Asn Arg Pro Phe Asp Leu 35 40 45
- Asp Glu Ala Val Ile Arg Arg Phe Pro Arg Arg Leu Met Val Asn Leu 50 55 60
- Pro Asp Ala Ser Asn Arg Glu Lys Ile Leu Lys Val Ile Leu Ala Lys
 65 70 75 80
- Glu Glu Leu Gly Ser Asp Val Asp Met Asp Ser Leu Ala Asn Met Thr 85 90 95
- Asp Gly Tyr Ser Gly Ser Asp Leu Lys Asn Leu Cys Xaa Thr Ala Ala 100 105 110
- His Tyr Pro Ile Arg Glu Ile Leu Glu Lys Glu Lys Glu Lys Ser 115 120 125
- Leu Ala Lys Thr Glu Gly Arg Pro Glu Pro Ala Leu Tyr Gly Ser Glu 130 135 140
- Asp Ile Arg Pro Leu Ser Ile Asp Asp Phe Lys Ile Cys Xaa

```
155
145
                    150
(2) INFORMATION FOR SEQ ID NO:3270:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 145 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..145
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576270
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3270:
Met Arg Lys Met Lys Asn Glu Phe Met Val Asn Trp Asp Gly Leu Arg
                                    10
                5
Thr Lys Asp Lys Glu Arg Val Leu Val Leu Gly Ala Thr Asn Arg Pro
                                25
Phe Asp Leu Asp Glu Ala Val Ile Arg Arg Phe Pro Arg Arg Leu Met
                            40
Val Asn Leu Pro Asp Ala Ser Asn Arg Glu Lys Ile Leu Lys Val Ile
                        55
Leu Ala Lys Glu Glu Leu Gly Ser Asp Val Asp Met Asp Ser Leu Ala
                                         75
                    70
Asn Met Thr Asp Gly Tyr Ser Gly Ser Asp Leu Lys Asn Leu Cys Xaa
                                     90
                85
Thr Ala Ala His Tyr Pro Ile Arg Glu Ile Leu Glu Lys Glu Lys Lys
                                105
Glu Lys Ser Leu Ala Lys Thr Glu Gly Arg Pro Glu Pro Ala Leu Tyr
                                                 125
                            120
Gly Ser Glu Asp Ile Arg Pro Leu Ser Ile Asp Asp Phe Lys Ile Cys
                                             140
                        135
    130
Xaa
145
(2) INFORMATION FOR SEQ ID NO:3271:
     (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 824 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: single
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: DNA (genomic)
     (ix) FEATURE:
           (A) NAME/KEY: -
           (B) LOCATION: 1..824
           (D) OTHER INFORMATION: / Ceres Seq. ID 1576273
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3271:
 accagocaco gocaagoogo attacaaaga acgogaacog otgocagtoo aaaccotacg
                                                                         60
 geogeogea geateaaget eecegaceaa accetacteg tacceegeeg eegeegeage
                                                                        120
 cgcagccgcg gccacaccag caagcagaac tagcagccat gccgcccaaa ttggacccct
                                                                        180
 ctcaggtggt ggaggtcttc gtccgcgtga cgggaggcga ggtcggcgcg gcgtcgtcgc
                                                                        240
 tggcccccaa gatcggcccg ctcggtctct ccccgaagaa gatcggcgag gacatcgcca
                                                                        300
 aggagacege caaggactgg aagggeetee gegteacegt caageteace gtgcagaace
                                                                        360
                                                                        420
 ggcaggccaa ggtctccgtc gtcccctccg ccgcggcgct cgtcatcaag gcgctcaagg
 aacccgagag ggacaggaag aaggtcaaga acatcaagca cagcGggcaa catcagcctc
                                                                        480
 gacgacgtca tcgagatcgc caagaCccat gcggaacagg tccatggcca aggagttggc
                                                                        540
                                                                        600
 cgggaccgtc aaggagatcc tggggacctg cgtcaGcgtc gggtgcaccg tcgatgggaa
 ggaccccaag gacttgcagc aggagatcga tgatggtgag gtcgagatcc cctcagctta
                                                                        660
 aaggctatac aactagaaat catcggacac tattaaagtg tggtgttttg ttccaakksa
                                                                        720
 gttcctgcac ctcaatcgcc tattattgtc tgctttagtt ccttcaagtc ttgtgagaga
                                                                        780
 cctaatcagt accttgtgcc ttataaaatt acatcttccg attc
 (2) INFORMATION FOR SEQ ID NO:3272:
      (i) SEQUENCE CHARACTERISTICS:
```

- (A) LENGTH: 219 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..219
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576274
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3272:

Pro Ala Thr Ala Lys Pro His Tyr Lys Glu Arg Glu Pro Leu Pro Val 1 5 10 15

Gln Thr Leu Arg Pro Pro Pro Ala Ser Ser Ser Pro Thr Lys Pro Tyr 20 25 30

Ser Tyr Pro Ala Ala Ala Ala Ala Ala Ala Ala Ala Thr Pro Ala Ser $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Arg Thr Ser Ser His Ala Ala Gln Ile Gly Pro Leu Ser Gly Gly 50 55 60

Gly Leu Arg Pro Arg Asp Gly Arg Arg Gly Arg Arg Gly Val Val Ala 65 70 75 80

Gly Pro Gln Asp Arg Pro Ala Arg Ser Leu Pro Glu Glu Asp Arg Arg 85 90 95

Arg Gln Ala His Arg Ala Glu Pro Ala Gly Gln Gly Leu Arg Arg Pro 115 120 125

Leu Arg Arg Gly Ala Arg His Gln Gly Ala Gln Gly Thr Arg Glu Gly 130 135 140

Gln Glu Glu Gly Gln Glu His Gln Ala Gln Arg Ala Thr Ser Ala Ser 145 150 155 160

Thr Thr Ser Ser Arg Ser Pro Arg Pro Met Arg Asn Arg Ser Met Ala
165 170 175

Lys Glu Leu Ala Gly Thr Val Lys Glu Ile Leu Gly Thr Cys Val Ser 180 185 190

Val Gly Cys Thr Val Asp Gly Lys Asp Pro Lys Asp Leu Gln Glu
195 200 205

- Ile Asp Asp Gly Glu Val Glu Ile Pro Ser Ala 210 215
- (2) INFORMATION FOR SEQ ID NO:3273:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 251 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..251
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576275
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3273:

Gln Pro Pro Pro Ser Arg Ile Thr Lys Asn Ala Asn Arg Cys Gln Ser 1 5 10 15

Lys Pro Tyr Gly Arg Arg Gln His Gln Ala Pro Arg Pro Asn Pro Thr 20 25 30

Arg Thr Pro Pro Pro Gln Pro Gln Pro Arg Pro His Gln Gln Ala
35 40 45

Glu Leu Ala Ala Met Pro Pro Lys Leu Asp Pro Ser Gln Val Val Glu 50 55 60

Val Phe Val Arg Val Thr Gly Gly Glu Val Gly Ala Ala Ser Ser Leu 65 70 75 80

Ala Pro Lys Ile Gly Pro Leu Gly Leu Ser Pro Lys Lys Ile Gly Glu

90 85 Asp Ile Ala Lys Glu Thr Ala Lys Asp Trp Lys Gly Leu Arg Val Thr 100 105 110 Val Lys Leu Thr Val Gln Asn Arg Gln Ala Lys Val Ser Val Val Pro 115 120 125 Ser Ala Ala Ala Leu Val Ile Lys Ala Leu Lys Glu Pro Glu Arg Asp 130 135 140 Arg Lys Lys Val Lys Asn Ile Lys His Ser Gly Gln His Gln Pro Arg 155 150 Arg Arg His Arg Asp Arg Gln Asp Pro Cys Gly Thr Gly Pro Trp Pro 165 170 175 Arg Ser Trp Pro Gly Pro Ser Arg Arg Ser Trp Gly Pro Ala Ser Ala 180 185 Ser Gly Ala Pro Ser Met Gly Arg Thr Pro Arg Thr Cys Ser Arg Arg 195 200 205 Ser Met Met Val Arg Ser Arg Ser Pro Gln Leu Lys Gly Tyr Thr Thr 210 215 220 Arg Asn His Arg Thr Leu Leu Lys Cys Gly Val Leu Phe Gln Xaa Ser 225 230 235 Ser Cys Thr Ser Ile Ala Tyr Tyr Cys Leu Leu 245 250 (2) INFORMATION FOR SEQ ID NO:3274: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 199 amino acids (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..199
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576276
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3274:
- Met Pro Pro Lys Leu Asp Pro Ser Gln Val Val Glu Val Phe Val Arg

 1 15
- Val Thr Gly Gly Glu Val Gly Ala Ala Ser Ser Leu Ala Pro Lys Ile
 20 25 30
- Gly Pro Leu Gly Leu Ser Pro Lys Lys Ile Gly Glu Asp Ile Ala Lys 35 40 45 Glu Thr Ala Lys Asp Trp Lys Gly Leu Arg Val Thr Val Lys Leu Thr
- 50 55 60
 Val Gln Asn Arg Gln Ala Lys Val Ser Val Val Pro Ser Ala Ala Ala
- 65 70 75 80
 Leu Val Ile Lys Ala Leu Lys Glu Pro Glu Arg Asp Arg Lys Lys Val
- Lys Asn Ile Lys His Ser Gly Gln His Gln Pro Arg Arg His Arg
- 100 105 110

 Asp Arg Gln Asp Pro Cys Gly Thr Gly Pro Trp Pro Arg Ser Trp Pro
 115 120 125
- Gly Pro Ser Arg Arg Ser Trp Gly Pro Ala Ser Ala Ser Gly Ala Pro 130 135 140
- Ser Met Gly Arg Thr Pro Arg Thr Cys Ser Arg Arg Ser Met Met Val 145 150 155 160
- Arg Ser Arg Ser Pro Gln Leu Lys Gly Tyr Thr Thr Arg Asn His Arg 165 170 175
- Thr Leu Leu Lys Cys Gly Val Leu Phe Gln Xaa Ser Ser Cys Thr Ser 180 185 190
- Ile Ala Tyr Tyr Cys Leu Leu 195
- (2) INFORMATION FOR SEQ ID NO:3275:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..573
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576315
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3275:

acgaagcaca caacaaacct gcagatccc catggcaggc tccacctcc tcgtwccct 60 tcccgtmccc gccctccat ctcgccaccg cttccacacg tccacgtccg catcccccg 120 ccacctgcgc ccctccctg ctacacgcct ccgcgctgcc cggcgtcggc atcccgacgc 180 cgtcgttgtc gtcccagatg cccgccctg ggtcggcgat ctatcgggcg ccgccggtc 240 ctaccgggac ggaagtgagg aggacgaaga cgacgcagat gaagatgagg acgaagacga 300 ggaccgcagc ctggacctac tggcccggtt cctgcactcc gtatcagga aggcctcacg 360 ccGcgcSgcg ccgCgctgcc aggtccgtgc tgccgccttc cgtccccgcc gagctggtga 420 agttttcggt caatggcgt cttgtcctga cgttcttatg gatcctgaag ggtcttctcg 480 aggtggtctg cacatttgga agcatggtgt ttggtAattc gattcaagaT tactgtacgc 540 tgccagctct tggagaaaaa aggttttcgg tgc

- (2) INFORMATION FOR SEQ ID NO:3276:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 171 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..171
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576316
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3276:

Arg Ser Thr Gln Gln Thr Cys Arg Ser Pro Met Ala Gly Ser Thr Ser $1 \ 5 \ 10 \ 15$

Leu Xaa Pro Leu Pro Xaa Pro Ala Pro Pro Ser Arg His Arg Phe His 20 25 30

Thr Ser Thr Ser Ala Ser Pro Arg His Leu Arg Pro Ser Pro Ala Thr 35 40 45

Arg Leu Arg Ala Ala Arg Arg Arg His Pro Asp Ala Val Val Val 50 55 60

Pro Asp Ala Arg Pro Trp Val Gly Asp Leu Ser Gly Ala Ala Ala Ser 65 70 75 80

Tyr Arg Asp Gly Ser Glu Glu Asp Glu Asp Asp Ala Asp Glu Asp Gl

Asp Glu Asp Glu Asp Arg Ser Leu Asp Leu Leu Ala Arg Phe Leu His
100 105 110

Ser Val Phe Arg Lys Ala Ser Arg Arg Xaa Ala Pro Arg Cys Gln Val 115 120 125

Arg Ala Ala Ala Phe Arg Pro Arg Arg Ala Gly Glu Val Phe Gly Gln
130
135
140

Trp Arg Ala Cys Pro Asp Val Leu Met Asp Pro Glu Gly Ser Ser Arg 145 150 155 160

- Gly Gly Leu His Ile Trp Lys His Gly Val Trp \$165\$ \$170
- (2) INFORMATION FOR SEQ ID NO:3277:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 190 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..190
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576317

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3277:
Glu Ala His Asn Lys Pro Ala Asp Pro Pro Trp Gln Ala Pro Pro Pro 1 5 10 15

Ser Xaa Pro Phe Pro Xaa Pro Pro Leu His Leu Ala Thr Ala Ser Thr 20 25 30

Arg Pro Arg Pro His Pro Pro Ala Thr Cys Ala Pro Pro Leu Leu His

Ala Ser Ala Leu Pro Gly Val Gly Ile Pro Thr Pro Ser Leu Ser Ser 50 55 60

Gln Met Pro Ala Pro Gly Ser Ala Ile Tyr Arg Ala Pro Pro Arg Pro 65 70 75 80

Thr Gly Thr Glu Val Arg Arg Thr Lys Thr Thr Gln Met Lys Met Arg 85 90 95

Thr Lys Thr Arg Thr Ala Ala Trp Thr Tyr Trp Pro Gly Ser Cys Thr 100 105 110

Pro Tyr Ser Gly Arg Pro His Ala Ala Xaa Arg Arg Ala Ala Arg Ser 115 120 125

Val Leu Pro Pro Ser Val Pro Ala Glu Leu Val Lys Phe Ser Val Asn 130 135 140

Gly Val Leu Val Leu Thr Phe Leu Trp Ile Leu Lys Gly Leu Leu Glu
145 150 155 160

Val Val Cys Thr Phe Gly Ser Met Val Phe Gly Asn Ser Ile Gln Asp 165 170 175

Tyr Cys Thr Leu Pro Ala Leu Gly Glu Lys Arg Phe Ser Val 180 185 190

- (2) INFORMATION FOR SEQ ID NO:3278:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 161 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..161
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576318
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3278: Met Ala Gly Ser Thr Ser Leu Xaa Pro Leu Pro Xaa Pro Ala Pro Pro

1 5 10 15
Ser Arg His Arg Phe His Thr Ser Thr Ser Ala Ser Pro Arg His Leu
20 25 30

Arg Pro Ser Pro Ala Thr Arg Leu Arg Ala Ala Arg Arg Arg His Pro

Asp Ala Val Val Val Pro Asp Ala Arg Pro Trp Val Gly Asp Leu
50 55 60

Ser Gly Ala Ala Ala Ser Tyr Arg Asp Gly Ser Glu Glu Asp Glu Asp 65 70 75 80

Asp Ala Asp Glu Asp Glu Asp Glu Asp Glu Asp Arg Ser Leu Asp Leu 85 90 95

Leu Ala Arg Phe Leu His Ser Val Phe Arg Lys Ala Ser Arg Arg Xaa 100 105 110

Ala Pro Arg Cys Gln Val Arg Ala Ala Ala Phe Arg Pro Arg Arg Ala 115 120 125

Gly Glu Val Phe Gly Gln Trp Arg Ala Cys Pro Asp Val Leu Met Asp 130 135 140

Pro Glu Gly Ser Ser Arg Gly Gly Leu His Ile Trp Lys His Gly Val 145 150 155 160

Trp

- (2) INFORMATION FOR SEQ ID NO:3279:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 447 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..447
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576329
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3279:

 aagacctcct cgcggctatg gcgaaGcgtc tgatcccgtc gctgaaccgg gttctggtgg agaagctgct gaagcccagc aagagcgccg gcggcatcct cctcccggag accaccaagc 120
 agctgaacgc cgctaaagtc gttgctgttg gccctggtga tcgtgatagg gatggcaagc 180
 tgatccctgt atctctgagc gaaggcgaca ctgttctgct tccggagtac ggtgggacag 240
 aagtgaagct tgcagaaaaa gagtaccttc ttttcagaga gcacgacata ctggggaagc 300
 tcgaggagta gctctggact gttaaaatgg agttgtttga aagtaggtat gcaagagttt tgccacggct tatcttttt ttttgtacgg gggaacaaat gagaaacaca acccttgtga 420
 gaatgcaata acactgcctc attcttg
- (2) INFORMATION FOR SEQ ID NO:3280:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..102
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576330
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3280:

Asp Leu Leu Ala Ala Met Ala Lys Arg Leu Ile Pro Ser Leu Asn Arg

1 10 15

Val Leu Val Glu Lys Leu Leu Lys Pro Ser Lys Ser Ala Gly Gly Ile 20 25 30

Leu Leu Pro Glu Thr Thr Lys Gln Leu Asn Ala Ala Lys Val Val Ala 35 40 45

Val Gly Pro Gly Asp Arg Asp Arg Asp Gly Lys Leu Ile Pro Val Ser 50 55 60

Leu Ser Glu Gly Asp Thr Val Leu Leu Pro Glu Tyr Gly Gly Thr Glu 65 70 75 80

Val Lys Leu Ala Glu Lys Glu Tyr Leu Leu Phe Arg Glu His Asp Ile 85 90 95

Leu Gly Lys Leu Glu Glu

100

- (2) INFORMATION FOR SEQ ID NO:3281:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 97 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..97
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576331
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3281:

and the article of the confidence of the article and the contract of

Met Ala Lys Arg Leu Ile Pro Ser Leu Asn Arg Val Leu Val Glu Lys

- (2) INFORMATION FOR SEQ ID NO: 3282:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 798 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..798
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576334
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3282: gcaaaaccct aaccttgtct tgtgcgcast ccgctattaa agtctgcgta cagtccgccg eggetaggeg accgeateeg cateteecet acgtettete geeggtegeg caegggeaaa 120 gcagcgatgg ctacagcgac ggcagttggt ggacccgaca ggtggagact gcggcgtcgt 180 cogoggogge agtgctggcc gtcgccgttg cctcgsagag tgtrctaggt ctgctcgctc 240 ttgcggttca aactgtaaat gttggagcag aaatatataa taaagatcag cgggcaatat 300 acaagttatt atctGggaag aatcaaatct gaaaatgtcc ctgaaaataa ggatgggtca gacgacgacg atgatgacga cgacgatgaa gacaatgacg atgagggtgg tgacgacgat 420 gatgatgctg aggaggaatt ctctggagaa gaagatgggg gtgatgacga tgatgaagat gatgatectg aagetaatgg tgaaggagga agtgacaacg acaatgatga cgacgaagat 540 ggtgatgatg atggcgatga ggacgatgaa ggtgatgagg acgacgaaga cgaggacgat 600 gatgaagatg acgaagacca gccaccttcc aagaagaaga aatgatttgc tcatccatgg atttacctca gcttctccat gctgttagtt gtgttgttta gatcatggac agctttggga tcaatgtagc ttgttgcttg tcatggtatc gtagtgtagg aaaatttgac atctgatgtt
- (2) INFORMATION FOR SEQ ID NO: 3283:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

aaatcactat cctgcttt

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..128
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576335
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3283:
- Tyr Tyr Leu Gly Arg Ile Lys Ser Glu Asn Val Pro Glu Asn Lys Asp 20 25 30
- Gly Ser Asp Asp Asp Asp Asp Asp Asp Asp Glu Asp Asn Asp Asp Asp 35 40 45
- Glu Gly Gly Asp Asp Asp Asp Asp Ala Glu Glu Glu Phe Ser Gly Glu 50 55 60
- Glu Asp Gly Gly Asp Asp Asp Asp Glu Asp Asp Pro Glu Ala Asn 65 70 75 80

Gly Glu Gly Gly Ser Asp Asn Asp Asn Asp Asp Asp Glu Asp Gly Asp 85 85 90 95 95

Asp Asp Gly Asp Glu Asp Asp Glu Gly Asp Glu Asp Glu Asp Glu Asp Glu Asp Glu Asp Glu Asp Asp Glu Asp Glu Asp Glu Asp Asp Glu Asp Glu Asp Glu Asp Glu Asp Asp Glu Asp Glu Asp Glu Asp Glu Asp Asp Glu Asp Gl

- (2) INFORMATION FOR SEQ ID NO: 3284:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 117 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..117
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576336
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3284:

Met Ser Leu Lys Ile Arg Met Gly Gln Thr Thr Thr Met Met Thr Thr 1 5 10 15

Thr Met Lys Thr Met Thr Met Arg Val Val Thr Thr Met Met Leu 20 25 30

Arg Arg Asn Ser Leu Glu Lys Lys Met Gly Val Met Thr Met Met Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Met Met Ile Leu Lys Leu Met Val Lys Glu Glu Val Thr Thr Met 50 55 60

Met Thr Thr Lys Met Val Met Met Met Ala Met Arg Thr Met Lys Val 65 70 75 80

Met Arg Thr Thr Lys Thr Arg Thr Met Met Lys Met Thr Lys Thr Ser 85 90 95 His Leu Pro Arg Arg Arg Asn Asp Leu Leu Ile His Gly Phe Thr Ser

100 105 Ala Ser Pro Cys Cys 115

(2) INFORMATION FOR SEQ ID NO:3285:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 111 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..111
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576337
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3285:

Met Gly Gln Thr Thr Met Met Thr Thr Thr Met Lys Thr Met Thr 10 15

Met Arg Val Val Thr Thr Met Met Met Leu Arg Arg Asn Ser Leu Glu
20 25 30

Lys Lys Met Gly Val Met Thr Met Met Lys Met Met Ile Leu Lys Leu 35 40 45

Met Val Lys Glu Glu Val Thr Thr Thr Met Met Thr Thr Lys Met Val 50 55 60

Met Met Met Ala Met Arg Thr Met Lys Val Met Arg Thr Thr Lys Thr 65 70 75 80

Arg Thr Met Met Lys Met Thr Lys Thr Ser His Leu Pro Arg Arg Arg 85 90 95

Asn Asp Leu Leu Ile His Gly Phe Thr Ser Ala Ser Pro Cys Cys

100 105 110

- (2) INFORMATION FOR SEQ ID NO:3286:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 646 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..646
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576347
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3286:

gacgggagaa aatctccaaa cgcagcaran mccctcgcgc cgccgacctc ttcagcctcg 60 cagcacaccg ccgccagccc gagtgaccgc tgcagcctag ggtttccgtc ggcgatggcg 120 qqtaarqraq qgaaqqgtct gctggcggcc aagacgacgg cggccaagag caccgacaag 180 qacaaqqaca qqaaqaarqc ccccqtqtcq cqctcctccc qcqccqqcct ccagttcccq 240 qtqqqtcqca tccaccqcca gctcaaqtcq cqtqcctctq cqcacqqccq cqtcqqccc 300 accqccqccq tctattccqc cqccatcctc gagtacctca ccgccgaggt cctcgagctg 360 qGccgqcaac gccagcaagg acctcaaggt caagcgcatc accccgcgcc acctgcagct cqccatccqc qqqqacqaqq aqctcqacac cctcatcaag ggcaccatcg ccgggggcgg 480 cqtcatcccq cacatccaca aqtcqctcat caacaagacc gccaaggagt gaatcaaggc 540 cqtqctqctq cttctqcctq actacaqtcc catctcqttc tgtacttgtg caatctgagt 600 ttaagtgcat gttggcacag ttctagtaaa ctcatcctgt tcacct

- (2) INFORMATION FOR SEQ ID NO:3287:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 186 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..186
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576348
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3287:

Asp Gly Arg Lys Ser Pro Asn Ala Ala Xaa Xaa Leu Ala Pro Pro Thr 1 5 10 15

Ser Ser Ala Ser Gln His Thr Ala Ala Ser Pro Ser Asp Arg Cys Ser 20 25 30

Leu Gly Phe Pro Ser Ala Met Ala Gly Xaa Xaa Gly Lys Gly Leu Leu 35 40 45

Ala Ala Lys Thr Thr Ala Ala Lys Ser Thr Asp Lys Asp Lys Asp Arg 50 55 60

Lys Xaa Ala Pro Val Ser Arg Ser Ser Arg Ala Gly Leu Gln Phe Pro 70 75 80

Val Gly Arg Ile His Arg Gln Leu Lys Ser Arg Ala Ser Ala His Gly 85 90 95

Arg Val Gly Ala Thr Ala Ala Val Tyr Ser Ala Ala Ile Leu Glu Tyr 100 105 110

Leu Thr Ala Glu Val Leu Glu Leu Gly Arg Gln Arg Gln Gln Gly Pro 115 120 125

Gln Gly Gln Ala His His Pro Ala Pro Pro Ala Ala Arg His Pro Arg 130 135 140

Gly Arg Gly Ala Arg His Pro His Gln Gly His His Arg Arg Gly Arg 145 150 155 160

Arg His Pro Ala His Pro Gln Val Ala His Gln Gln Asp Arg Gln Gly
165 170 175

Val Asn Gln Gly Arg Ala Ala Ala Ser Ala 180 185

(2) INFORMATION FOR SEQ ID NO:3288:

- (i) SEQUENCE CHARACTERISTICS:

 (A) LENGTH: 148 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear
 (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..148
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576349
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3288:

Met Ala Gly Xaa Xaa Gly Lys Gly Leu Leu Ala Ala Lys Thr Thr Ala 1 5 10 15

Ala Lys Ser Thr Asp Lys Asp Lys Asp Arg Lys Xaa Ala Pro Val Ser 20 25 30

Arg Ser Ser Arg Ala Gly Leu Gln Phe Pro Val Gly Arg Ile His Arg $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gln Leu Lys Ser Arg Ala Ser Ala His Gly Arg Val Gly Ala Thr Ala 50 55 60

Ala Val Tyr Ser Ala Ala Ile Leu Glu Tyr Leu Thr Ala Glu Val Leu 65 70 75 80

Glu Leu Gly Arg Gln Arg Gln Gln Gly Pro Gln Gly Gln Ala His His 85 90 95

Pro Ala Pro Pro Ala Ala Arg His Pro Arg Gly Arg Gly Ala Arg His 100 105 110

Pro His Gln Gly His His Arg Arg Gly Arg Arg His Pro Ala His Pro 115 120 125

Gln Val Ala His Gln Gln Asp Arg Gln Gly Val Asn Gln Gly Arg Ala 130 135 140

Ala Ala Ser Ala

145

- (2) INFORMATION FOR SEQ ID NO:3289:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 454 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..454
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576358
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3289:

tatccaaatt caaatttcag acaatgagtg atgcagacaa gctagctgct ggcattgcag 60 cacctgtggg tggagtgatg acagagtgtg gtaccaatcc tcctgtcgaa catattctct 120 cagctgagga tgcagagtgc tgtatctgcc tatgcccgta tgaagatggc gtggaactac 180 gtgagcttcc ttgcaaccac cattttcact gcagctgcat tgacaagtgg cttcacataa 240 atgctacatg cccattgtgc aagttcgaca tcatcaagag caaccgtgac atagaagagg 300 tctaggtcac tacacaata acgccgcaaa acttttgtca tgtctctgct gtgttcttca 360 gtactaccgc taccacattt gcgatcctga gttgtgatta ccggtccttt aggtgatgca 420 caaatggtac tcgGtgaata ttccttttat tagc

- (2) INFORMATION FOR SEQ ID NO:3290:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..100

Attorney Docket No. 2750-1235P Client Docket No. 80145.003 (D) OTHER INFORMATION: / Ceres Seq. ID 1576359 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3290: Ser Lys Phe Lys Phe Gln Thr Met Ser Asp Ala Asp Lys Leu Ala Ala 10 5 Gly Ile Ala Ala Pro Val Gly Gly Val Met Thr Glu Cys Gly Thr Asn 20 25 30 Pro Pro Val Glu His Ile Leu Ser Ala Glu Asp Ala Glu Cys Cys Ile 40 Cys Leu Cys Pro Tyr Glu Asp Gly Val Glu Leu Arg Glu Leu Pro Cys 55 Asn His His Phe His Cys Ser Cys Ile Asp Lys Trp Leu His Ile Asn 65 70 75 Ala Thr Cys Pro Leu Cys Lys Phe Asp Ile Ile Lys Ser Asn Arg Asp 85 90 Ile Glu Glu Val 100 (2) INFORMATION FOR SEQ ID NO:3291: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 93 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..93 (D) OTHER INFORMATION: / Ceres Seq. ID 1576360 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3291: Met Ser Asp Ala Asp Lys Leu Ala Ala Gly Ile Ala Ala Pro Val Gly 10 5 Gly Val Met Thr Glu Cys Gly Thr Asn Pro Pro Val Glu His Ile Leu 20 25 Ser Ala Glu Asp Ala Glu Cys Cys Ile Cys Leu Cys Pro Tyr Glu Asp 40 45 Gly Val Glu Leu Arg Glu Leu Pro Cys Asn His His Phe His Cys Ser 50 55 60 Cys Ile Asp Lys Trp Leu His Ile Asn Ala Thr Cys Pro Leu Cys Lys 70 75 Phe Asp Ile Ile Lys Ser Asn Arg Asp Ile Glu Glu Val 85 (2) INFORMATION FOR SEQ ID NO:3292:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 75 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..75
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576361
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3292:

Met Thr Glu Cys Gly Thr Asn Pro Pro Val Glu His Ile Leu Ser Ala 10

Glu Asp Ala Glu Cys Cys Ile Cys Leu Cys Pro Tyr Glu Asp Gly Val 25

Glu Leu Arg Glu Leu Pro Cys Asn His His Phe His Cys Ser Cys Ile 40

Asp Lys Trp Leu His Ile Asn Ala Thr Cys Pro Leu Cys Lys Phe Asp 50 55

Ile Ile Lys Ser Asn Arg Asp Ile Glu Glu Val

65 70 75	
(2) INFORMATION FOR SEQ ID NO:3293:	
(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 339 base pairs	
(B) TYPE: nucleic acid	
(C) STRANDEDNESS: single	
(D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic)	
(ix) FEATURE:	
(A) NAME/KEY: - (B) LOCATION: 1339	
(D) OTHER INFORMATION: / Ceres Seq. ID 1576362	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3293: aacaacageg aacacaNtet gCttegeatt tetteceate eccettegea acceaaacee	60
caacNtcgCt ccgcatcgat ggcgcccaag gccgagaaga agcccgcggc gaagaagccg	120
geggaggagg agecegegge tgagaaggeg eeegeeggga agaagcagag gtgggggttg tteattgeea ceaagtgatt tggeetggea geaggaggge tetteggaat aagaatggat	180 240
gtggctgtaa ctctgcttct agaccggtga tggttcagct tagaagcagg ggatcttcat	300
catcaqaata aaaacqtgtg ctgttgtgtt gctgtgtcc	
(2) INFORMATION FOR SEQ ID NO:3294: (i) SEQUENCE CHARACTERISTICS:	
(A) LENGTH: 65 amino acids	
(B) TYPE: amino acid (C) STRANDEDNESS:	
(D) TOPOLOGY: linear	
(ii) MOLECULE TYPE: peptide (ix) FEATURE:	
(A) NAME/KEY: peptide	
(B) LOCATION: 165 (D) OTHER INFORMATION: / Ceres Seq. ID 1576363	
(vi) SEQUENCE DESCRIPTION: SEO ID NO:3294:	
Asn Asn Ser Glu His Xaa Leu Leu Arg Ile Ser Ser His Pro Pro Ser 1 5 10 15	
Gln Pro Lys Pro Gln Xaa Arg Ser Ala Ser Met Ala Pro Lys Ala Glu	
20 25 30 Lys Lys Pro Ala Ala Lys Lys Pro Ala Glu Glu Pro Ala Ala Glu	
35 40 45	
Lys Ala Pro Ala Gly Lys Lys Gln Arg Trp Gly Leu Phe Ile Ala Thr 50 55 60	
Lys	
65 (2) INFORMATION FOR SEQ ID NO:3295:	
(i) SEQUENCE CHARACTERISTICS:	
(A) LENGTH: 76 amino acids (B) TYPE: amino acid	
(C) STRANDEDNESS:	
(D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide	
(ix) FEATURE:	
(A) NAME/KEY: peptide (B) LOCATION: 176	
(D) OTHER INFORMATION: / Ceres Seq. ID 1576364	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3295: Thr Thr Ala Asn Thr Xaa Cys Phe Ala Phe Leu Pro Ile Pro Leu Arg	
1 10 15	
Asn Pro Asn Pro Asn Xaa Ala Pro His Arg Trp Arg Pro Arg Pro Arg	
Arg Ser Pro Arg Arg Arg Ser Arg Arg Arg Arg Ser Pro Arg Leu Arg	
35 40 45 Arg Arg Pro Pro Gly Arg Ser Arg Gly Gly Gly Cys Ser Leu Pro Pro	
50 55 60	

```
Ser Asp Leu Ala Trp Gln Gln Glu Gly Ser Ser Glu
                    70
(2) INFORMATION FOR SEQ ID NO: 3296:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 46 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..46
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576365
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3296:
Gln Gln Arg Thr Xaa Ser Ala Ser His Phe Phe Pro Ser Pro Phe Ala
                                    10
                5
Thr Gln Thr Pro Xaa Ser Leu Arg Ile Asp Gly Ala Gln Gly Arg Glu
                                25
Glu Ala Arg Gly Glu Glu Ala Gly Gly Gly Ala Arg Gly
                            4.0
(2) INFORMATION FOR SEQ ID NO:3297:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 634 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..634
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576372
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3297:
acccaagtcc aagcaccttc ccaaaaaaat cccccatttt cttcgaggcg aggagagcgt
                                                                        60
                                                                        120
gaaagacagg gcaccggcag cgacgatgtc ggggcgcggc aagggcggca aaggtctggs
caagggcgga Gcaaagcgcc accgtaaggT gctccgtgac aacatccagg gcatcaccaa
                                                                        180
gecegegate egtaggetgg eteggagggg eggegtgaag egeatttegg ggettateta
                                                                        240
cgaggagggt aagactgtgg acctctatgt ccccaggaag tgctcggcca caaacaggat
                                                                        300
catcactgcc aaggaccatg cctctgtcca gatcaacatt ggccacttgg atgcgaatgg
                                                                        360
cctgtatgat ggtcacttca caacgtttgc tctctctggg tttgtccgtg ctcagggtga
                                                                        420
cgcagacagc tecttggaca ggetgtggca aaagaagaag getgatatca agcagtagat
                                                                       480
tttacatcta gtttaccaag aattggacac cgccttagct atgttttgaa ttcatgtcac
                                                                        540
tatatgcAat gttgtgattt cagctggtac cttaaatctg aagatttagt atctttgttg
                                                                        600
ggttccttct gagtttgatg tgtggtgttc gttt
(2) INFORMATION FOR SEQ ID NO:3298:
      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 158 amino acids
           (B) TYPE: amino acid
           (C) STRANDEDNESS:
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: peptide
     (ix) FEATURE:
           (A) NAME/KEY: peptide
           (B) LOCATION: 1..158
           (D) OTHER INFORMATION: / Ceres Seq. ID 1576373
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3298:
 Pro Lys Ser Lys His Leu Pro Lys Lys Ile Pro His Phe Leu Arg Gly
                                     10
 Glu Glu Ser Val Lys Asp Arg Ala Pro Ala Ala Thr Met Ser Gly Arg
                                 25
 Gly Lys Gly Gly Lys Gly Leu Xaa Lys Gly Gly Ala Lys Arg His Arg
```

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
Lys Val Leu Arg Asp Asn Ile Gln Gly Ile Thr Lys Pro Ala Ile Arg
                        55
Arg Leu Ala Arg Arg Gly Gly Val Lys Arg Ile Ser Gly Leu Ile Tyr
                    70
                                        75
Glu Glu Gly Lys Thr Val Asp Leu Tyr Val Pro Arg Lys Cys Ser Ala
                                    90
                85
Thr Asn Arg Ile Ile Thr Ala Lys Asp His Ala Ser Val Gln Ile Asn
                                                    110
            100
                                105
Ile Gly His Leu Asp Ala Asn Gly Leu Tyr Asp Gly His Phe Thr Thr
                           120
                                                125
Phe Ala Leu Ser Gly Phe Val Arg Ala Gln Gly Asp Ala Asp Ser Ser
                        135
                                            140
Leu Asp Arg Leu Trp Gln Lys Lys Lys Ala Asp Ile Lys Gln
                                        155
                   150
(2) INFORMATION FOR SEQ ID NO: 3299:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 130 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..130
```

- (D) OTHER INFORMATION: / Ceres Seq. ID 1576374
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3299: Met Ser Gly Arg Gly Lys Gly Gly Lys Gly Leu Xaa Lys Gly Gly Ala 10 5 Lys Arg His Arg Lys Val Leu Arg Asp Asn Ile Gln Gly Ile Thr Lys 20 25 Pro Ala Ile Arg Arg Leu Ala Arg Arg Gly Gly Val Lys Arg Ile Ser 45 40 Gly Leu Ile Tyr Glu Glu Gly Lys Thr Val Asp Leu Tyr Val Pro Arg 55 Lys Cys Ser Ala Thr Asn Arg Ile Ile Thr Ala Lys Asp His Ala Ser 75 70 Val Gln Ile Asn Ile Gly His Leu Asp Ala Asn Gly Leu Tyr Asp Gly 90 85 His Phe Thr Thr Phe Ala Leu Ser Gly Phe Val Arg Ala Gln Gly Asp 105 110 Ala Asp Ser Ser Leu Asp Arg Leu Trp Gln Lys Lys Lys Ala Asp Ile 120 115 Lys Gln

- (2) INFORMATION FOR SEQ ID NO:3300:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 847 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..847
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576379
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3300: 60 acaaaatgaa gatgaagatg aagaagttga tgaaagtgaa gaagctgcag atgattcacg caagcctgca acatcaattg gctcagcata cagactgctt actccatcag taaaggtcca 120 gttgttgata tacttcatgc tgaaatacgc aatggagatt ttgctttcag agtctagtgt 180 240 tatcactaat cactatttca gttggaacac aagcgcagtg gncaattttt ctagcaatcc ttgggttgac ggtgcttcct gttaatgctg ttgttggaac atacatcagc aatatgtttg 300

aggacaggca actgeteatg gteteteaaa ttaegttget agtaggeatt atetteaget 360 tcaaggttac gagtacatac tctgttgtcc agtatgttgt ctcagcactt gtcacatttg 420 tttctgcaga agttcttgaa ggtgtgaacc tttccctcct atcaagcgtg atgtcatctc 480 540 qcctctcccq tggcacatac aacggtggcc tcctctcgac ggaggccVgg gaccctggcg 600 agggtggtcg ctgactgcac catcactgcg gcggggtacc tgggcgtggg gaagcttctc aacgtcaccc tgctaccatc cctggtgata tgtgttgcgt ccattgcctg caccttcctg 660 720 acatataact cgcttttctg atggagcttc acaatgtatt tgtgtcatca tgattcgttc 780 catattaqcq caaatcaagg cagctgggag accgccattg ccattgcccg aaggggctat 840 tqtattacta ttattatatg ttcgtcgatt tgattgctat aaattgattg ataaaatgat tqtaqcq

- (2) INFORMATION FOR SEQ ID NO:3301:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 87 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..87
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576380
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3301:

Gln Asn Glu Asp Glu Asp Glu Glu Val Asp Glu Ser Glu Glu Ala Ala 1 5 10 15

Asp Asp Ser Arg Lys Pro Ala Thr Ser Ile Gly Ser Ala Tyr Arg Leu 20 25 30

Leu Thr Pro Ser Val Lys Val Gln Leu Leu Ile Tyr Phe Met Leu Lys 35 40 45

Tyr Ala Met Glu Ile Leu Leu Ser Glu Ser Ser Val Ile Thr Asn His 50 55 60

Tyr Phe Ser Trp Asn Thr Ser Ala Val Xaa Asn Phe Ser Ser Asn Pro 65 70 75 80

Trp Val Asp Gly Ala Ser Cys 85

- (2) INFORMATION FOR SEQ ID NO:3302:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 86 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..86
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576381
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3302:

Met Phe Glu Asp Arg Gln Leu Leu Met Val Ser Gln Ile Thr Leu Leu 10 5 10 15

Val Gly Ile Ile Phe Ser Phe Lys Val Thr Ser Thr Tyr Ser Val Val

Gln Tyr Val Val Ser Ala Leu Val Thr Phe Val Ser Ala Glu Val Leu 35 40 45

Glu Gly Val Asn Leu Ser Leu Leu Ser Ser Val Met Ser Ser Arg Leu 50 55 60

Ser Arg Gly Thr Tyr Asn Gly Gly Leu Leu Ser Thr Glu Ala Xaa Asp 70 75 80

Pro Gly Glu Gly Gly Arg

- (2) INFORMATION FOR SEQ ID NO:3303:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 78 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..78
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576382
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3303:

Met Val Ser Gln Ile Thr Leu Leu Val Gly Ile Ile Phe Ser Phe Lys 1 10 15

Val Thr Ser Thr Tyr Ser Val Val Gln Tyr Val Val Ser Ala Leu Val 20 25 30

Thr Phe Val Ser Ala Glu Val Leu Glu Gly Val Asn Leu Ser Leu Leu 35 40 45

Ser Ser Val Met Ser Ser Arg Leu Ser Arg Gly Thr Tyr Asn Gly Gly 50 55 60

Leu Leu Ser Thr Glu Ala Xaa Asp Pro Gly Glu Gly Gly Arg
70 75

- (2) INFORMATION FOR SEQ ID NO:3304:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 688 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..688
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576401
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3304:

60 ccacccaccc ccacacccac qaqcccqqcq gcgtgctctc tgctgtctgc tctgcaccca ggaccttcgg ccacaggagc tcagccctat ccctcgacgg tgctcgcggc cggcgcgcg 120 eggetegace ettececate tecageteca egeegtetee acegeetgga atecagggee 180 tecgaegeca ecceaectee acegeetgga ategaggaee gteggegtee tteagateag 240 cggcgagcgc aacaaggagc aggaggagaa gacggacacc tggcaccgcg tggagcggag 300 cagcgggaga ttcctgcgca ggttccgact gcccgagaac gccaagacgg agcagatcag 360 ggccgccatg gagaacggcg tgcttacagt cactgtgccc aaggaggacg ccaagaagcc 420 CCtgaagtga agtccattca gatctccggc tagacctcgg tctgcggtcg tcgtacctgc 480 gtggtttgag gaacggcagt tcgcctcggt cgttctgtga aataaaattg ggttacaaga 540 600 attatggcgt ttgtcaatat gatcgtaatg tcgtaggatg gtggaatgtg gtcacaaact ttgcgtatgt tgggtctact ggtggtgtct actctgaatc tatgtatgga tgtcatgagt 660 tccagttcct gtggtgttcg tatgatgc

- (2) INFORMATION FOR SEQ ID NO:3305:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 150 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..150
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576402
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3305:

Pro Pro Thr Pro Thr Pro Thr Ser Pro Ala Ala Cys Ser Leu Leu Ser

1 10 15

Ala Leu His Pro Gly Pro Ser Ala Thr Gly Ala Gln Pro Tyr Pro Ser

Thr Val Leu Ala Ala Gly Ala Arg Arg Leu Asp Pro Ser Pro Ser Pro 35 40 45

```
Ala Pro Arg Arg Leu His Arg Leu Glu Ser Arg Ala Ser Asp Ala Thr 50 55 60
```

Pro Pro Pro Pro Gly Ile Glu Asp Arg Arg Pro Ser Asp Gln 65 70 75 80

Arg Arg Ala Gl
n Gl
n Gly Ala Gly Gly Glu Asp Gly His Leu Ala Pro $85 \hspace{1cm} 90 \hspace{1cm} 95$

Arg Gly Ala Glu Gln Arg Glu Ile Pro Ala Gln Val Pro Thr Ala Arg

Glu Arg Gln Asp Gly Ala Asp Gln Gly Arg His Gly Glu Arg Arg Ala 115 120 125

Tyr Ser His Cys Ala Gln Gly Gly Arg Gln Glu Ala Pro Glu Val Lys 130 135 140

Ser Ile Gln Ile Ser Gly 145 150

- (2) INFORMATION FOR SEQ ID NO:3306:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 142 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..142
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576403
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3306:

His Pro Pro Pro His Pro Arg Ala Arg Arg Ala Leu Cys Cys Leu 1 10 15

Leu Cys Thr Gln Asp Leu Arg Pro Gln Glu Leu Ser Pro Ile Pro Arg 20 25 30

Arg Cys Ser Arg Pro Ala Arg Gly Gly Ser Thr Leu Pro His Leu Gln 35 40

Leu His Ala Val Ser Thr Ala Trp Asn Pro Gly Pro Pro Thr Pro Pro 50 55 60

His Leu His Arg Leu Glu Ser Arg Thr Val Gly Val Leu Gln Ile Ser 65 70 75 80

Gly Glu Arg Asn Lys Glu Glu Glu Glu Lys Thr Asp Thr Trp His Arg 85 90 95

Val Glu Arg Ser Ser Gly Arg Phe Leu Arg Arg Phe Arg Leu Pro Glu 100 105 110

Asn Ala Lys Thr Glu Gln Ile Arg Ala Ala Met Glu Asn Gly Val Leu 115 120 125

Thr Val Thr Val Pro Lys Glu Asp Ala Lys Lys Pro Leu Lys 130 135 140

- (2) INFORMATION FOR SEQ ID NO:3307:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 140 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..140
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576404

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3307:

Thr His Pro His Thr His Glu Pro Gly Gly Val Leu Ser Ala Val Cys
1 10 15

Ser Ala Pro Arg Thr Phe Gly His Arg Ser Ser Ala Leu Ser Leu Asp 20 25 30

Gly Ala Arg Gly Arg Arg Ala Ala Ala Arg Pro Phe Pro Ile Ser Ser

Ser Thr Pro Ser Pro Pro Pro Gly Ile Gln Gly Leu Arg Arg His Pro 50

Thr Ser Thr Ala Trp Asn Arg Gly Pro Ser Ala Ser Phe Arg Ser Ala 65

Ala Ser Ala Thr Arg Ser Arg Arg Arg Arg Arg Thr Pro Gly Thr Ala 85

Trp Ser Gly Ala Ala Gly Asp Ser Cys Ala Gly Ser Asp Cys Pro Arg 100

Thr Pro Arg Arg Arg Ser Arg Ser Gly Pro Pro Trp Arg Thr Ala Cys Leu 125

Gln Ser Leu Cys Pro Arg Arg Thr Pro Arg Ser Pro 130

- (2) INFORMATION FOR SEQ ID NO:3308:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 425 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..425
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576405
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3308:

atccagttac agtccggagt ctggttagta ctccgcatgt tcgttcttt tacgccgacg 60 gaaatcaacc tgcgccgctg ccttctccgt tctcgcgtc gcctccgcct ccgctgccgc 120 cgcgcaggtc agggtcatgt cgatcttcga gtacaacggg agcgccgtgg tggcgatggt 180 ggggaagaac tgCttcgcga tcgccagcga ccgccgcctc ggcgtgcagc tgcagacgat 240 cgccaccgac ttccgacggg tgttcaaggt ccacgacaag ctctacatcg ggctctcggg 300 gctcgccacc gacgcccaga cgctgtatca gcggctggtg ttcaggcaca agttgtacca 360 gctgagggag gagagggaca tgaagcccga agcctttgcc agccttgtt cagccctcct 420 ctatq

- (2) INFORMATION FOR SEQ ID NO:3309:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 141 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..141
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576406
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3309:

Ile Gln Leu Gln Ser Gly Val Trp Leu Val Leu Arg Met Phe Val Leu 1 5 10 15

Phe Thr Pro Thr Glu Ile Asn Leu Arg Arg Cys Leu Leu Arg Ser Arg 20 25 30

Arg Arg Leu Arg Leu Arg Cys Arg Arg Ala Gly Gln Gly His Val Asp 35 40 45

Leu Arg Val Gln Arg Glu Arg Arg Gly Gly Asp Gly Glu Glu Leu 50 55 60

Leu Arg Asp Arg Gln Arg Pro Pro Pro Arg Arg Ala Ala Ala Asp Asp 65 70 75 80
Arg His Arg Leu Pro Thr Gly Val Gln Gly Pro Arg Gln Ala Leu His

85 90 95 Arg Ala Leu Gly Ala Arg His Arg Arg Pro Asp Ala Val Ser Ala Ala

Arg Ala Leu Gly Ala Arg His Arg Arg Pro Asp Ala Val Ser Ala Ala 100 105 110

Gly Val Gln Ala Gln Val Val Pro Ala Glu Gly Glu Gly His Glu 115 120 125 Ala Arg Ser Leu Cys Gln Pro Cys Phe Ser Pro Pro Leu 130 135 140

- (2) INFORMATION FOR SEQ ID NO:3310:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 120 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..120
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576407
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3310:

Tyr Ala Asp Gly Asn Gln Pro Ala Pro Leu Pro Ser Pro Phe Ser Pro 20 25 30

Ser Pro Pro Pro Pro Leu Pro Pro Arg Arg Ser Gly Ser Cys Arg Ser 35 40 45

Ser Ser Thr Thr Gly Ala Pro Trp Trp Arg Trp Trp Gly Arg Thr Ala 50 55 60

Ser Arg Ser Pro Ala Thr Ala Ala Ser Ala Cys Ser Cys Arg Arg Ser 65 70 75 80

Pro Pro Thr Ser Asp Gly Cys Ser Arg Ser Thr Thr Ser Ser Thr Ser 85 90 95

Gly Ser Arg Gly Ser Pro Pro Thr Pro Arg Arg Cys Ile Ser Gly Trp
100 105 110

Cys Ser Gly Thr Ser Cys Thr Ser 115 120

- (2) INFORMATION FOR SEQ ID NO:3311:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 129 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..129
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576408
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3311:

Met Phe Val Leu Phe Thr Pro Thr Glu Ile Asn Leu Arg Arg Cys Leu 1 5 10 15

Leu Arg Ser Arg Arg Arg Leu Arg Leu Arg Cys Arg Arg Ala Gly Gln

20 25 30

Gly His Val Asp Leu Arg Val Gln Arg Glu Arg Arg Gly Gly Asp Gly
35 40 45

Gly Glu Glu Leu Leu Arg Asp Arg Gln Arg Pro Pro Pro Arg Arg Ala
50 55 60

Ala Ala Asp Asp Arg His Arg Leu Pro Thr Gly Val Gln Gly Pro Arg
70 75 80

Gln Ala Leu His Arg Ala Leu Gly Ala Arg His Arg Arg Pro Asp Ala 85 90 95

Val Ser Ala Ala Gly Val Gln Ala Gln Val Val Pro Ala Glu Gly Gly
100 105 110

Glu Gly His Glu Ala Arg Ser Leu Cys Gln Pro Cys Phe Ser Pro Pro 115 120 125

(2) INFORMATION FOR SEQ ID NO:3312:

Leu

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 986 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..986
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576429
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3312:

aacgctgcct tcccgccgtt atcctttccc acgactcctc tcccccgcgt gagaacatgc 60 cccgcgtcct tgtccaggca ccattgccgc cggccgctgc ctcccttgca ccatcggcct 120 ctacagatga agctcaaagg aagtgacttc aaattatcac tcaagaatct caagagcatt 180 tggtgaagag tgttctcctg attttgtgaa tgtccagtat gcagtgaact tctagaagtt 240 300 tttatttatq tatqcatqtt ttaaatactt tgatcaatgg atgcttataa agattctatg gaatttctgg aggagttatc tgtctttgat cttcatctgt ggaggccgtg gtggccggtt 360 cggcggcggg ttccgcgacg agggcccgcc cgcagaggtc gtcgaggtgt cgacgttcgt 420 gcacgcgtgc gagggagacg cggtgacgaa actcaccaac gagaaGgtgc cctacttcaa 480 cgcgcccata tacctgcaga acaagactca ggtcggcaag gtcgacgaga tcttcggccc 540 600 catcaacgaa tcctatttct ctgtgaagat gatggaaggg atcattgcaa catcgtacaa ggaaggcgac aagttctata tcgaccccat gaaattgctg cctctttcgc gcttcctgcc 660 gcaaccaaag ggacaatctc aaggagcacc tagaggtggt ggccgtgtgg aaggggtggt 720 780 ggccgaggcc gtggtggttc gttccggggt ggaagaggac caccaagggg tggtggccga 840 ggtccaaggg gtggaagccg tggtggtttt agagggcgag gaaggttcta ggtgtagttt 900 qaqtttgatg atgtttttt ttgttgaggc atcatagcta cccaattgga aacttccatg 960 ttcttqtaac ctgatatgtt taaggtagca gaacactttg tttgtggaac ttggattctc aattgaaaca aagggtttgt acctgt

- (2) INFORMATION FOR SEQ ID NO:3313:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 209 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..209
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576430
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3313:

Met Tyr Ala Cys Phe Lys Tyr Phe Asp Gln Trp Met Leu Ile Lys Ile
1 5 10 15

Leu Trp Asn Phe Trp Arg Ser Tyr Leu Ser Leu Ile Phe Ile Cys Gly
20 25 30

Gly Arg Gly Gly Arg Phe Gly Gly Gly Phe Arg Asp Glu Gly Pro Pro 35 40 45

Ala Val Thr Lys Leu Thr Asn Glu Lys Val Pro Tyr Phe Asn Ala Pro
65 70 75 80

Ile Tyr Leu Gln Asn Lys Thr Gln Val Gly Lys Val Asp Glu Ile Phe
85 90 95

Gly Pro Ile Asn Glu Ser Tyr Phe Ser Val Lys Met Met Glu Gly Ile $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$

Ile Ala Thr Ser Tyr Lys Glu Gly Asp Lys Phe Tyr Ile Asp Pro Met 115 120 125

Lys Leu Leu Pro Leu Ser Arg Phe Leu Pro Gln Pro Lys Gly Gln Ser 130 135 140

Gln Gly Ala Pro Arg Gly Gly Gly Arg Val Glu Gly Val Val Ala Glu 145 150 155 160 Ala Val Val Val Arg Ser Gly Val Glu Glu Asp His Gln Gly Val Val

Ala Glu Val Gln Gly Val Glu Ala Val Val Leu Glu Gly Glu Glu Gly Glu Gly Ser Arg Cys Ser Leu Ser Leu Met Met Phe Phe Val Glu Ala 195 - 200 - 205 - 205

(2) INFORMATION FOR SEQ ID NO:3314:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 138 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:

Ser

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..138
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576431
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3314:

Met Asp Ala Tyr Lys Asp Ser Met Glu Phe Leu Glu Glu Leu Ser Val

Phe Asp Leu His Leu Trp Arg Pro Trp Trp Pro Val Arg Arg Arg Val
20 25 30

Pro Arg Arg Gly Pro Ala Arg Arg Gly Arg Arg Gly Val Asp Val Arg 35 40 45

Ala Arg Val Arg Gly Arg Gly Asp Glu Thr His Gln Arg Glu Gly
50 60

Ala Leu Leu Gln Arg Ala His Ile Pro Ala Glu Gln Asp Ser Gly Arg 65 70 75 80

Gln Gly Arg Arg Asp Leu Arg Pro His Gln Arg Ile Leu Phe Leu Cys 85 90 95

Glu Asp Asp Gly Arg Asp His Cys Asn Ile Val Gln Gly Arg Arg Gln
100 105 110

Val Leu Tyr Arg Pro His Glu Ile Ala Ala Ser Phe Ala Leu Pro Ala 115 120 125

Ala Thr Lys Gly Thr Ile Ser Arg Ser Thr 130 135

- (2) INFORMATION FOR SEQ ID NO:3315:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 198 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..198
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576432

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3315:

Met Leu Ile Lys Ile Leu Trp Asn Phe Trp Arg Ser Tyr Leu Ser Leu

1 10 15

Ile Phe Ile Cys Gly Gly Arg Gly Gly Arg Phe Gly Gly Phe Arg 20 25 30

Asp Glu Gly Pro Pro Ala Glu Val Val Glu Val Ser Thr Phe Val His 35 40 45

Ala Cys Glu Gly Asp Ala Val Thr Lys Leu Thr Asn Glu Lys Val Pro 50 60

Tyr Phe Asn Ala Pro Ile Tyr Leu Gln Asn Lys Thr Gln Val Gly Lys 65 70 75 80

Val Asp Glu Ile Phe Gly Pro Ile Asn Glu Ser Tyr Phe Ser Val Lys 85 90 95

```
Met Met Glu Gly Ile Ile Ala Thr Ser Tyr Lys Glu Gly Asp Lys Phe
                               105
           100
Tyr Ile Asp Pro Met Lys Leu Leu Pro Leu Ser Arg Phe Leu Pro Gln
                          120
                                              125
       115
Pro Lys Gly Gln Ser Gln Gly Ala Pro Arg Gly Gly Arg Val Glu
                                          140
                       135
Gly Val Val Ala Glu Ala Val Val Arg Ser Gly Val Glu Glu Asp
                                      155
                   150
His Gln Gly Val Val Ala Glu Val Gln Gly Val Glu Ala Val Val
                                                      175
               165
                                 170
Leu Glu Gly Glu Gly Ser Arg Cys Ser Leu Ser Leu Met Met Phe
           180
                               185
```

Phe Phe Val Glu Ala Ser 195

- (2) INFORMATION FOR SEQ ID NO:3316:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 582 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..582
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576433
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3316: atccaggegt acagecetee geetegtgaa ggcaaageae gegcaaagee accaeagegt 60 cgtcctcttc gtctccagtc caagcaagcg aagagcaccc ctcgagatct ctccctcccc 120 gcgccgccat ggacgcagtT gactcggtag tcgacccgct ccgggagttc gccaaggaca 180 gcatccgcct cgtcaagcgc tgccacaagc cggaccgcaa ggagttcacc aaggtcgccg 240 cgcggactgc gatcggcttc gtcgtcatgg gattcgtcgg cttctttgtc aagctcatct 300 tcatccctat caacaacatc atcgtcggct ccggctgatc cgttcacctc aggctagtgg 360 ctgcaggagt ggacaatggc gtcactacct tggaggcagc accgttttca gctctgattt 420 480 ccgcaaagca attcctttag gacttgtgtt gttaaagggc aactccctta tcttttcctc tcttgaggtc gtgtggtaga tctggaactc ttttgtacct ggtgccgaat agtcttttgt 540 ggatcagcgg gtgacaaaat tTaaatggtt actgtcttgg gg
- (2) INFORMATION FOR SEQ ID NO:3317:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 49 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..49
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576434
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3317:
- Ile Gln Ala Tyr Ser Pro Pro Pro Arg Glu Gly Lys Ala Arg Ala Lys
 1 5 10 15
- Pro Pro Gln Arg Arg Pro Leu Arg Leu Gln Ser Lys Gln Ala Lys Ser 20 25 30
- Thr Pro Arg Asp Leu Ser Leu Pro Ala Pro Pro Trp Thr Gln Leu Thr 35 40 45

Arg

- (2) INFORMATION FOR SEQ ID NO:3318:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 46 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..46
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576435
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3318:

Ser Arg Arg Thr Ala Leu Arg Leu Val Lys Ala Lys His Ala Gln Ser 1 5 10 15

His His Ser Val Val Leu Phe Val Ser Ser Pro Ser Lys Arg Ala 20 25 30

Pro Leu Glu Ile Ser Pro Ser Pro Arg Arg His Gly Arg Ser 35 40 45

- (2) INFORMATION FOR SEQ ID NO:3319:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 69 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..69
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576436
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3319:

Met Asp Ala Val Asp Ser Val Val Asp Pro Leu Arg Glu Phe Ala Lys
1 10 15

Asp Ser Ile Arg Leu Val Lys Arg Cys His Lys Pro Asp Arg Lys Glu 20 25 30

Phe Thr Lys Val Ala Ala Arg Thr Ala Ile Gly Phe Val Val Met Gly 35 40 45

Phe Val Gly Phe Phe Val Lys Leu Ile Phe Ile Pro Ile Asn Asn Ile 50 55

Ile Val Gly Ser Gly

65

- (2) INFORMATION FOR SEQ ID NO:3320:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 810 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..810
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576437
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3320:

aacgacccaa gtcccaacgg aacttagctg ccgagcgccc aaagccccac cgccgctccc 60 atcaagcggc gctaaaggtt tcctcgcccg caacgcgatg ccgaagaaca agggaaaggg 120 aggcaagaac cggaagcggg gcaagaacga rgcggacgac gagaagcggg agctggntgt 180 tcaaggagga cgggcaggag tacgcgcagg tgacgcggat gctgggcaac ggccgctgcg 240 aggegetetg categaegge aceaagegee tetgeeacat eeggggeaag atgeaeaaga 300 aggtgtggat cgccgccggg gacatcgtgc tcgtcggcct gcgcgactac caGggacgac 360 aaggcggacg tcatcctcaa gtacatgaac gacgaggccc gcctgctcaa gGCctacggc 420 480 gagatccccg acaacgtcag gctcaacgag ggcgtcgttg atgaggagga agccggcgcg caggatgact atatacagtt cgaggacgag gacatcgaca agatctgatg atcgcctctt 540 600 ccacacggtc cctttccatg gtaaactaaa cgtatgcaaa acaattgtat ccttctgttt 660 tgtggtggct accatgactg aagaatggta gtcgtggtga tggtataatg atttgggcgg agagtactgt gtataatgat ttgggggcac ttgttgtgcc caataacccc atatggtgat 720 atagcaagta tgggactgaa cgaaccgttc ctctcccttt ctgttaatat gatatatttg 780 gttgggcatg atccaatttt ttttttttt

- (2) INFORMATION FOR SEQ ID NO:3321:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..128
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576438
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3321:

Thr Thr Gln Val Pro Thr Glu Leu Ser Cys Arg Ala Pro Lys Ala Pro 1 5 10 15

Pro Pro Leu Pro Ser Ser Gly Ala Lys Gly Phe Leu Ala Arg Asn Ala 20 25 30

Met Pro Lys Asn Lys Gly Lys Gly Lys Asn Arg Lys Arg Gly Lys 35 40 45

Asn Xaa Ala Asp Asp Glu Lys Arg Glu Leu Xaa Val Gln Gly Gly Arg 50 55 60

Ala Gly Val Arg Ala Gly Asp Ala Asp Ala Gly Gln Arg Pro Leu Arg 65 70 75 80

Gly Ala Leu His Arg Arg His Gln Ala Pro Leu Pro His Pro Gly Gln 85 90 95

Asp Ala Gln Glu Gly Val Asp Arg Arg Arg Gly His Arg Ala Arg Arg 100 110 110

Pro Ala Arg Leu Pro Gly Thr Thr Arg Arg Thr Ser Ser Ser Thr 115 120 125

- (2) INFORMATION FOR SEQ ID NO:3322:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 152 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..152
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576439
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3322:

Arg Pro Lys Ser Gln Arg Asn Leu Ala Ala Glu Arg Pro Lys Pro His

Arg Arg Ser His Gln Ala Ala Leu Lys Val Ser Ser Pro Ala Thr Arg 20 25 30

Cys Arg Arg Thr Arg Glu Arg Glu Ala Arg Thr Gly Ser Gly Ala Arg 35 40 45

Thr Xaa Arg Thr Thr Arg Ser Gly Ser Trp Xaa Phe Lys Glu Asp Gly 50 55 60

Gln Glu Tyr Ala Gln Val Thr Arg Met Leu Gly Asn Gly Arg Cys Glu 65 70 75 80

Ala Leu Cys Ile Asp Gly Thr Lys Arg Leu Cys His Ile Arg Gly Lys

Met His Lys Lys Val Trp Ile Ala Ala Gly Asp Ile Val Leu Val Gly
100 105 110

Leu Arg Asp Tyr Gln Gly Arg Gln Gly Gly Arg His Pro Gln Val His
115 120 125

Glu Arg Arg Gly Pro Pro Ala Gln Gly Leu Arg Arg Asp Pro Arg Gln 130 135 140

Arg Gln Ala Gln Arg Gly Arg Arg

145 150

- (2) INFORMATION FOR SEQ ID NO:3323:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 96 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..96
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576440
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3323:

Met Pro Lys Asn Lys Gly Lys Gly Lys Asn Arg Lys Arg Gly Lys 1 5 10 15

Asn Xaa Ala Asp Asp Glu Lys Arg Glu Leu Xaa Val Gln Gly Gly Arg 20 25 30

Ala Gly Val Arg Ala Gly Asp Ala Asp Ala Gly Gln Arg Pro Leu Arg 35 40 45

Gly Ala Leu His Arg Arg His Gln Ala Pro Leu Pro His Pro Gly Gln 50 55 60

Asp Ala Gln Glu Gly Val Asp Arg Arg Arg Gly His Arg Ala Arg Arg 65 70 75 80

Pro Ala Arg Leu Pro Gly Thr Thr Arg Arg Thr Ser Ser Ser Thr 85 90 95

- (2) INFORMATION FOR SEQ ID NO:3324:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1030 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1030
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576441
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3324:

gtcggtaggt gtccctccct ttactccctc cgccctccca cagtcccact gcccttctcc 60 teggtecate geaageteet geggteetge etaeggeegt aeggeggeat ecaecettet 120 gccgcatcgt ctttctcaag acgctgcccc aggtccatcg cgcctagggt tcgccgagtc 180 cggcggcgct aagataatga gtgggcaccg aaacagtcat ggaaagcgct actctgatta 240 tactgaaact ggaggcggta agagaagaaa teetggtgat gatacetatg eeeetggtee 300 tgatgacact gtgtatcgct acctctgcgc ctctagaaaa atTgggagta tcattggcag 360 gggtggagaa atTgcaaagc agttgaggac tgagacccaa gctaAgatca ggattggtga 420 qaqtqtccct ggatgtgaag agcgagttat taccatattt agctcaagtc gaagaactaa 480 taccatcgat gatgctgaag ataaggtttg ccctgctcag gatgccctct ttagagttca 540 tgagaggett gccactgatg agagttttgg taacgaagac agcgaagaaa tttcacctca 600 agttactgtt cgcctgcttg tgccatcaga ccagattgga tgcattcttg gaaaaggtgg 660 gcacatcatc caaggaatcc gcagtgagac tggtgcgcaa atacgcgtgc ttagtaagga 720 tcatatccct gcatgtgcca ttagtggcga tgaacttctc cagatatctg gggacatggt 780 agttgtcaaa aaggctcttt gtcaagtgtc atctcgcctc cataacaacc catccaagtc 840 acagcatett ettgeateca gettgaceca acegtateca gggggtacec acettggtgg 900 ttcctctgct gcacctgttg tagggatcac tccagtaatt cctccttatg gaggctacaa 960 aggtgacgtg gcaggagatt ggccctcttt ataccaaccc cgacgggatg agagctctgc 1020

(2) INFORMATION FOR SEQ ID NO:3325:

aaaggagttt

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 343 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..343
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576442
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3325:
- Ser Val Gly Val Pro Pro Phe Thr Pro Ser Ala Leu Pro Gln Ser His
- Cys Pro Ser Pro Arg Ser Ile Ala Ser Ser Cys Gly Pro Ala Tyr Gly 20 25 30
- Arg Thr Ala Ala Ser Thr Leu Leu Pro His Arg Leu Ser Gln Asp Ala 35 40 45
- Ala Pro Gly Pro Ser Arg Leu Gly Phe Ala Glu Ser Gly Gly Ala Lys 50 55 60
- Ile Met Ser Gly His Arg Asn Ser His Gly Lys Arg Tyr Ser Asp Tyr
- 65 70 75 80
 Thr Glu Thr Gly Gly Gly Lys Arg Arg Asn Pro Gly Asp Asp Thr Tyr
- 85 90 95 Ala Pro Gly Pro Asp Asp Thr Val Tyr Arg Tyr Leu Cys Ala Ser Arg
- 100 105 110 Lys Ile Gly Ser Ile Ile Gly Arg Gly Glu Ile Ala Lys Gln Leu
- 115 120 125
 Arg Thr Glu Thr Gln Ala Lys Ile Arg Ile Gly Glu Ser Val Pro Gly
- 130 135 140
 Cys Glu Glu Arg Val Ile Thr Ile Phe Ser Ser Arg Arg Thr Asn
- Cys Giu Giu Arg val lie Thr lie Phe Ser Ser Ser Arg Arg III Ash 145 150 155 160
- Thr Ile Asp Asp Ala Glu Asp Lys Val Cys Pro Ala Gln Asp Ala Leu 165 170 175
- Phe Arg Val His Glu Arg Leu Ala Thr Asp Glu Ser Phe Gly Asn Glu
 180 185 190
- Asp Ser Glu Glu Ile Ser Pro Gln Val Thr Val Arg Leu Leu Val Pro
 195 200 205
- Ser Asp Gln Ile Gly Cys Ile Leu Gly Lys Gly Gly His Ile Ile Gln 210 215 220
- Gly Ile Arg Ser Glu Thr Gly Ala Gln Ile Arg Val Leu Ser Lys Asp 225 230 235 240
- His Ile Pro Ala Cys Ala Ile Ser Gly Asp Glu Leu Leu Gln Ile Ser 245 250 255
- Gly Asp Met Val Val Val Lys Lys Ala Leu Cys Gln Val Ser Ser Arg 260 265 270
- Leu His Asn Asn Pro Ser Lys Ser Gln His Leu Leu Ala Ser Ser Leu 275 280 285
- Thr Gln Pro Tyr Pro Gly Gly Thr His Leu Gly Gly Ser Ser Ala Ala 290 295 300
- Pro Val Val Gly Ile Thr Pro Val Ile Pro Pro Tyr Gly Gly Tyr Lys 305 310 315
- Gly Asp Val Ala Gly Asp Trp Pro Ser Leu Tyr Gln Pro Arg Asp 325 330 335
- Glu Ser Ser Ala Lys Glu Phe
 - 340
- (2) INFORMATION FOR SEQ ID NO:3326:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 278 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

60

600

(B) LOCATION: 1..278

(D) OTHER INFORMATION: / Ceres Seq. ID 1576443

 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3326:

 Met
 Ser
 Gly
 His
 Gly
 Lys
 Arg
 Tyr
 Ser
 Asp
 Tyr
 Thr

 1
 5
 10
 15
 15

 Glu
 Thr
 Gly
 Gly
 Lys
 Arg
 Arg
 Asp
 Pro
 Gly
 Asp
 Thr
 Tyr
 Ala
 Asp
 Asp
 Thr
 Yal
 Tyr
 Arg
 Tyr
 Leu
 Cys
 Ala
 Ser
 Arg
 Lys

 1
 20
 25
 30
 20
 20
 20
 30
 20
 20
 20
 20
 40
 20
 45
 20
 45
 20
 45
 20
 45
 20
 45
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 20
 <

Thr Glu Thr Gln Ala Lys Ile Arg Ile Gly Glu Ser Val Pro Gly Cys
65 70 75 80

Glu Glu Arg Val Ile Thr Ile Phe Ser Ser Ser Arg Arg Thr Asn Thr 85 90 95

Ile Asp Asp Ala Glu Asp Lys Val Cys Pro Ala Gln Asp Ala Leu Phe 100 105 110

Arg Val His Glu Arg Leu Ala Thr Asp Glu Ser Phe Gly Asn Glu Asp 115 120 125

Ser Glu Glu Ile Ser Pro Gln Val Thr Val Arg Leu Leu Val Pro Ser 130 135 140

Asp Gln Ile Gly Cys Ile Leu Gly Lys Gly Gly His Ile Ile Gln Gly 145 150 155 160

Ile Arg Ser Glu Thr Gly Ala Gln Ile Arg Val Leu Ser Lys Asp His 165 170 175

Ile Pro Ala Cys Ala Ile Ser Gly Asp Glu Leu Leu Gln Ile Ser Gly 180 185 190

Asp Met Val Val Lys Lys Ala Leu Cys Gln Val Ser Ser Arg Leu
195 200 205

His Asn Asn Pro Ser Lys Ser Gln His Leu Leu Ala Ser Ser Leu Thr 210 215 220

Gln Pro Tyr Pro Gly Gly Thr His Leu Gly Gly Ser Ser Ala Ala Pro 225 230 235 240

Val Val Gly Ile Thr Pro Val Ile Pro Pro Tyr Gly Gly Tyr Lys Gly 245 250 255

Asp Val Ala Gly Asp Trp Pro Ser Leu Tyr Gln Pro Arg Arg Asp Glu 260 265 270

Ser Ser Ala Lys Glu Phe 275

- (2) INFORMATION FOR SEQ ID NO:3327:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 713 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..713
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576444
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3327: taggataatt cctggtgctg ctgcaacaga aatagagctg gcaaagagat tgaaggagtt

ctctttgaag gaaacaggt tggaccagta tgctgttgcg aaatttgctg aaastttgaa 120 atggttccaa gaaccctggc agaaaatgcc ggacttagcg caatggatgt aatatcctct 180 ctttatgctg agcatgctag tggcaatgtg aaagttggca ttgacctgga ggaaggtgcc 240 tgcaaggaca tcacgacctt gaaaatatgg gacctttatg tcacaaagtt ctttgcccta 300 aaatattctg ccgatgccgc atgcaccgtg ctgcgggttg accagatcat tatggcgaaG csggcaggag gtccaagaag agatgccag cctggtggcg ggatggacga ggactagttt 420 gactgtgatt gttctctttg tgtatcacgt acgcaaggtt tcagagcagg gaacatcatg 480 tattatattatag ggattagttg tgtaggggg tttggaggg 540

tcttatttag ggtttggttc tgtagaaggt tttggtgcct gtagttcacg tttggaaggg ttgcacggct gtgctggtat cgtatgggga atttgcttgt tctttcctgg tgtattattg

.

cagtgccgat gtattattca ttcgagggtt ctttccttca gttcatcaca ccgactgagc 660 tcatatgagt sytacttcag tttttttatt atagaagcaa aaatgttaca gcc

- (2) INFORMATION FOR SEQ ID NO:3328:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 98 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..98
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576445
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3328:

Met Val Pro Arg Thr Leu Ala Glu Asn Ala Gly Leu Ser Ala Met Asp 1 5 10 15

Val Ile Ser Ser Leu Tyr Ala Glu His Ala Ser Gly Asn Val Lys Val 20 25 30

Gly Ile Asp Leu Glu Glu Gly Ala Cys Lys Asp Ile Thr Thr Leu Lys 35 40 45

Ile Trp Asp Leu Tyr Val Thr Lys Phe Phe Ala Leu Lys Tyr Ser Ala 50 60

Asp Ala Ala Cys Thr Val Leu Arg Val Asp Gln Ile Ile Met Ala Lys 65 70 75 80

Xaa Ala Gly Gly Pro Arg Arg Asp Ala Gln Pro Gly Gly Met Asp

Glu Asp

- (2) INFORMATION FOR SEQ ID NO:3329:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 84 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..84
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576446
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3329:

Met Asp Val Ile Ser Ser Leu Tyr Ala Glu His Ala Ser Gly Asn Val

Lys Val Gly Ile Asp Leu Glu Glu Gly Ala Cys Lys Asp Ile Thr Thr 20 25 30

Leu Lys Ile Trp Asp Leu Tyr Val Thr Lys Phe Phe Ala Leu Lys Tyr 35 40 45

Ser Ala Asp Ala Ala Cys Thr Val Leu Arg Val Asp Gln Ile Ile Met 50 55 60

Ala Lys Xaa Ala Gly Gly Pro Arg Arg Asp Ala Gln Pro Gly Gly Gly 65 70 75 80

Met Asp Glu Asp

- (2) INFORMATION FOR SEQ ID NO:3330:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 78 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..78
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576447
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3330:

Met Ser Tyr Leu Gly Phe Gly Ser Val Glu Gly Phe Gly Ala Cys Ser 1 5 10 15

Ser Arg Leu Glu Gly Leu His Gly Cys Ala Gly Ile Val Trp Gly Ile 20 25 30

Cys Leu Phe Phe Pro Gly Val Leu Leu Gln Cys Arg Cys Ile Ile His 35 40 45

Ser Arg Val Leu Ser Phe Ser Ser Ser His Arg Leu Ser Ser Tyr Glu 50 60

Xaa Tyr Phe Ser Phe Phe Ile Ile Glu Ala Lys Met Leu Gln 65 70 75

- (2) INFORMATION FOR SEQ ID NO:3331:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 927 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..927
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576470
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3331: atttgcatct gagttcctga ttgttgtatt ccagtttctt ctgtgagttt tgtgggatcr 60 craggaagaa ctagaaggat gtcgtgctgc rgargcaact rcrggtvcvg cgccggctgc 120 aagtroggca roggotgogg agggtgoaag atgtacoogg acatggotga roaggtgaco 180 accactaccc agacteteat catgggtgtw geaccetect rmcgeegeeg eegeteeege 240 teccageteg tgtteegett ettgeageeg tegeegegaa geteeagaga aetteegtea 300 acatggggaa racacgtggt atggrarccg ggcgcaagct caagacccac cgcagaacca 360 gcggtgggct gacaaggcat acaagaagag ccatttgggS caatgagtgg aagaaaccct 420 tcgctgggtc atcccatgcc aagggcattg ycctggagaa gattggtatt gaggccaagc 480 agcccaactc cgctatccgt aagtgtgctc gtgttcagct tgttaagaat ggcaagaaga 540 ttgctgcctt cgtgccaaat gacggttgtt tgaactacat tgaggaaaat gatgaggtct 600 tgattgctgg atttggtcgt aagggccacg ctgtgggaga tattcctggt gtccggttca 660 aggtcgtcaa ggtttccggt gtgtctctgc ttgccctttt caaggagaag aaagagaagc 720 caaggtetta gattgetett getaccaaaa teageaageg tggagttgaa aegggaggge 780 gttagatgat taagaagaat ggttgcttgc tatgtttgca gtgcattcgt gcaattgtta 840 acctaagatt ttgttggtga aaacgatttc ttttcagact tgcttctgtt gagtgctatc 900
- (2) INFORMATION FOR SEQ ID NO:3332:

attccatatc aatgtacttc ctcttct

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 97 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..97
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576471
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3332:
- Met Ser Cys Cys Xaa Xaa Asn Xaa Xaa Xaa Ala Gly Cys Lys Xaa 1 10 15
- Gly Xaa Gly Cys Gly Gly Cys Lys Met Tyr Pro Asp Met Ala Xaa Gln
 20 25 30
- Val Thr Thr Thr Gln Thr Leu Ile Met Gly Xaa Ala Pro Ser Xaa 35 40 45
- Arg Arg Arg Ser Arg Ser Gln Leu Val Phe Arg Phe Leu Gln Pro 50 55 60

Ser Pro Arg Ser Ser Arg Glu Leu Pro Ser Thr Trp Gly Xaa His Val 65 70 75 80

Val Trp Xaa Pro Gly Ala Ser Ser Arg Pro Thr Ala Glu Pro Ala Val 85 90 95

Gly

- (2) INFORMATION FOR SEQ ID NO:3333:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 142 amino acids

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3333:

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..142
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576472
- Met Gly Xaa Thr Arg Gly Met Xaa Xaa Gly Arg Lys Leu Lys Thr His

 1
 5
 10
 15

 Arg Arg Thr Ser Gly Gly Leu Thr Arg His Thr Arg Arg Ala Ile Trp 20
 25
 30

 Xaa Asp Glu Trp Lys Lys Pro Phe Ala Gly Ser Ser His Ala Lys Gly

Xaa Asn Glu Trp Lys Lys Pro Phe Ala Gly Ser Ser His Ala Lys Gly
35 40 45

Ile Xaa Leu Glu Lys Ile Gly Ile Glu Ala Lys Gln Pro Asn Ser Ala 50 55 60
Ile Arg Lys Cys Ala Arg Val Gln Leu Val Lys Asn Gly Lys Lys Ile

65 70 75 80
Ala Ala Phe Val Pro Asn Asp Gly Cys Leu Asn Tyr Ile Glu Glu Asn

85 90 95
Asp Glu Val Leu Ile Ala Gly Phe Gly Arg Lys Gly His Ala Val Gly
100 105 110

Asp Ile Pro Gly Val Arg Phe Lys Val Val Lys Val Ser Gly Val Ser 115 120 125

Leu Leu Ala Leu Phe Lys Glu Lys Lys Glu Lys Pro Arg Ser 130 135 140

- (2) INFORMATION FOR SEQ ID NO:3334:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 136 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..136
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576473
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3334:
- Met Xaa Xaa Gly Arg Lys Leu Lys Thr His Arg Arg Thr Ser Gly Gly 1 5 10

Leu Thr Arg His Thr Arg Arg Ala Ile Trp Xaa Asn Glu Trp Lys Lys 20 25 30

Pro Phe Ala Gly Ser Ser His Ala Lys Gly Ile Xaa Leu Glu Lys Ile
35 40 45

Gly Ile Glu Ala Lys Gln Pro Asn Ser Ala Ile Arg Lys Cys Ala Arg 50 55 60

Val Gln Leu Val Lys Asn Gly Lys Lys Ile Ala Ala Phe Val Pro Asn 65 70 75 80

Asp Gly Cys Leu Asn Tyr Ile Glu Glu Asn Asp Glu Val Leu Ile Ala 85 90 95 Gly Phe Gly Arg Lys Gly His Ala Val Gly Asp Ile Pro Gly Val Arg 100 105 110

Phe Lys Val Val Lys Val Ser Gly Val Ser Leu Leu Ala Leu Phe Lys
115 120 125

Glu Lys Lys Glu Lys Pro Arg Ser 130 135

- (2) INFORMATION FOR SEQ ID NO:3335:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 440 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..440
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576485
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3335:

aaaccctage cgccgcaga ccattcgttt ctcgcgagcc atcgcttctg taattctcag 60 gcatccggaa gaaatggcca agtcgaagaa ccacacggcg cacaaccagt cgttcaaggc 120 gcacaagaac ggcattaaga aacccaagcg ccaccgccag acctccacca aggggatgga 180 ccccaagttc ctgaggaacc tgaggtattc taggaagggc aacaaaaaga gtggtgaggc 240 tgaagctgag gaaagcatgg ctttgtttcc tctgtttta gctcagttcc 300 acctttagga cctggggttt tgctaaagat ggGaacttaa gtggtgttac tgtatgatgg 360 caaggacctt ttgctgccga agGttatgtt ttgaagttca tgctaccttt taaagtacgg 420 attaccttgt gcctatgttc

- (2) INFORMATION FOR SEQ ID NO:3336:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 84 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..84
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576486
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3336:

Asn Pro Ser Arg Arg Gln Thr Ile Arg Phe Ser Arg Ala Ile Ala Ser 1 5 10 15 Val Ile Leu Arg His Pro Glu Glu Met Ala Lys Ser Lys Asn His Thr

Val Ile Leu Arg His Pro Glu Glu Met Ala Lys Ser Lys Ash His Init 20 25 30

Ala His Asn Gln Ser Phe Lys Ala His Lys Asn Gly Ile Lys Lys Pro
35 40 45

Lys Arg His Arg Gln Thr Ser Thr Lys Gly Met Asp Pro Lys Phe Leu 50 55 60

Arg Asn Leu Arg Tyr Ser Arg Lys Gly Asn Lys Lys Ser Gly Glu Ala 65 70 75 80

- Glu Ala Glu Glu
- (2) INFORMATION FOR SEQ ID NO:3337:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 60 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..60
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576487
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3337:

Met Ala Lys Ser Lys Asn His Thr Ala His Asn Gln Ser Phe Lys Ala 1 5 10 15

His Lys Asn Gly Ile Lys Lys Pro Lys Arg His Arg Gln Thr Ser Thr 20 25 30

Lys Gly Met Asp Pro Lys Phe Leu Arg Asn Leu Arg Tyr Ser Arg Lys 35

Gly Asn Lys Lys Ser Gly Glu Ala Glu Ala Glu Glu 50 55 60

- (2) INFORMATION FOR SEQ ID NO:3338:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 577 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..577
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576491
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3338: gageegaact caacecaact tetetecete tecetegeet geetgeegtt cegegtttga ccaactcccc cgcaccgtaa ccctagcagc agatcggcca tggagagctg ggcgacctgg 120 gtggggacaa gcgtcacctc cgccttcttc gcctccctcg agcgctgctc ctgcatcaac 180 ctctccaccg acgacgacga cgacgacgag gaccacgacg aggccaagga ccggcccctc 240 atcctcgccg ccgcccacg ccacgactcc gccgccaagc ccgatccaga ctccgccgcc 300 gaggaccagg acgaccagaa gcaagagcag ccgccMgctg ccgccgtatg aatcaaaccc 360 gattccttgc ttgtactagc tgctactgct gttatgtcgc caaataaagt cgtgtgtgcg 420 tgtgcagtca gtactactgc tctgctgcta ctatcctagt cctagtatat tagtatatta 480 tacagtcctc tctgtgaaat ttgaatcgac tcgaaaatca aaccccacca atatgagctt 540 gttaatattt gtcctcccga atcaaccagc gcttgtt
- (2) INFORMATION FOR SEQ ID NO:3339:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..125
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576492
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3339:
- Ser Arg Thr Gln Pro Asn Phe Ser Pro Ser Pro Ser Pro Ala Cys Arg

 1 10 15

 15 10 15
- Ser Ala Phe Asp Gln Leu Pro Arg Thr Val Thr Leu Ala Ala Asp Arg 20 25 30
- Pro Trp Arg Ala Gly Arg Pro Gly Trp Gly Gln Ala Ser Pro Pro 35 40 45
- Ser Ser Pro Pro Ser Ser Ala Ala Pro Ala Ser Thr Ser Pro Pro Thr 50 55 60
- Thr Thr Thr Thr Arg Thr Thr Thr Arg Pro Arg Thr Gly Pro Ser
 70 75 80
- Ser Ser Pro Pro Pro His Ala Thr Thr Pro Pro Pro Ser Pro Ile Gln 85 90 95
- Thr Pro Pro Pro Arg Thr Arg Thr Thr Arg Ser Lys Ser Ser Arg Xaa 100 105 110

 Leu Pro Pro Tyr Glu Ser Asn Pro Ile Pro Cys Leu Tyr
- 115 120 (2) INFORMATION FOR SEQ ID NO:3340:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 83 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..83
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576493
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3340:

Met Glu Ser Trp Ala Thr Trp Val Gly Thr Ser Val Thr Ser Ala Phe 1 5 10 15

Phe Ala Ser Leu Glu Arg Cys Ser Cys Ile Asn Leu Ser Thr Asp Asp 20 25 30

Asp Asp Asp Glu Asp His Asp Glu Ala Lys Asp Arg Pro Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu Ala Ala Ala Pro Arg His Asp Ser Ala Ala Lys Pro Asp Pro Asp 50 55 60

Ser Ala Ala Glu Asp Gln Asp Asp Gln Lys Gln Glu Gln Pro Xaa Ala 65 70 75 80

Ala Ala Val

- (2) INFORMATION FOR SEQ ID NO:3341:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 618 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..618
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576494
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3341:

agecgactga atettecace tegettegeg ecteeggete egegeeggge eegeataate 60 tgtgctcggg atcgcctctt cccgcggcaa atgggggccg actccgagga cgccgtcaag 120 cageteagee teeteatgga geaagtdgag geeeegetga agagategtt teagaatatg 180 caccagggct atcctaaaga aacactggtg cgtttcctta aggctagaga gtggaatgta 240 gcaaaggctc ataaaatgat tgtagaatgt ttgaattgga ggattcaaaa tgaaattgat 300 agtgtgctag agaggcctat agtcccagta gatttataca ggtcaatacg tgattcacaa 360 cttattggcc tgtcaggata cacaaaggag ggtctcccaa tttttggcat tggtgttgga 420 catagcacat atgacaaagc ttcggtccac tactatgtgc aatctcatat ccagattaac 480 540 gagtaccgtg atcgtataat tttgcctagg ctgacacaac agtttgggcg gcctgttacc 600 agctgtataa aagtgctgga tatgactggt ttgaagctat cagcactaag ccaaataaag atgttgactT ccatatcg

- (2) INFORMATION FOR SEQ ID NO:3342:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 206 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..206
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576495
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3342:

Ser Arg Leu Asn Leu Pro Pro Arg Phe Ala Pro Pro Ala Pro Arg Arg 1 10 15

Ala Arg Ile Ile Cys Ala Arg Asp Arg Leu Phe Pro Arg Gln Met Gly
20 25 30

Ala Asp Ser Glu Asp Ala Val Lys Gln Leu Ser Leu Leu Met Glu Gln

40 35 Xaa Glu Ala Pro Leu Lys Arg Ser Phe Gln Asn Met His Gln Gly Tyr 60 55 Pro Lys Glu Thr Leu Val Arg Phe Leu Lys Ala Arg Glu Trp Asn Val 70 Ala Lys Ala His Lys Met Ile Val Glu Cys Leu Asn Trp Arg Ile Gln 90 Asn Glu Ile Asp Ser Val Leu Glu Arg Pro Ile Val Pro Val Asp Leu 100 105 Tyr Arg Ser Ile Arg Asp Ser Gln Leu Ile Gly Leu Ser Gly Tyr Thr 120 Lys Glu Gly Leu Pro Ile Phe Gly Ile Gly Val Gly His Ser Thr Tyr 140 135 Asp Lys Ala Ser Val His Tyr Tyr Val Gln Ser His Ile Gln Ile Asn 150 155 Glu Tyr Arg Asp Arg Ile Ile Leu Pro Arg Leu Thr Gln Gln Phe Gly 165 170 Arg Pro Val Thr Ser Cys Ile Lys Val Leu Asp Met Thr Gly Leu Lys 180 185 Leu Ser Ala Leu Ser Gln Ile Lys Met Leu Thr Ser Ile Ser 195 200

- (2) INFORMATION FOR SEQ ID NO:3343:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 176 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..176
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576496
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3343:

Met Gly Ala Asp Ser Glu Asp Ala Val Lys Gln Leu Ser Leu Leu Met 1 5 5 10 10 15 15 Glu Gln Xaa Glu Ala Pro Leu Lys Arg Ser Phe Gln Asn Met His Gln

20 25 30 30 The Levi Lys Physics Physi

Gly Tyr Pro Lys Glu Thr Leu Val Arg Phe Leu Lys Ala Arg Glu Trp 35 40 45

Asn Val Ala Lys Ala His Lys Met Ile Val Glu Cys Leu Asn Trp Arg 50 55 60 Ile Gln Asn Glu Ile Asp Ser Val Leu Glu Arg Pro Ile Val Pro Val

65 70 75 80
Asp Leu Tyr Arg Ser Ile Arg Asp Ser Gln Leu Ile Gly Leu Ser Gly

85 90 95

Tyr Thr Lys Glu Gly Leu Pro Ile Phe Gly Ile Gly Val Gly His Ser

Thr Tyr Asp Lys Ala Ser Val His Tyr Tyr Val Gln Ser His Ile Gln
115 120 125

Ile Asn Glu Tyr Arg Asp Arg Ile Ile Leu Pro Arg Leu Thr Gln Gln
130 135 140

Phe Gly Arg Pro Val Thr Ser Cys Ile Lys Val Leu Asp Met Thr Gly 145 150 155 160

Leu Lys Leu Ser Ala Leu Ser Gln Ile Lys Met Leu Thr Ser Ile Ser 165 170 175

- (2) INFORMATION FOR SEQ ID NO:3344:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 161 amino acids
 - (B) TYPE: amino acid

Ser

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..161
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576497
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3344:

Met Glu Gln Xaa Glu Ala Pro Leu Lys Arg Ser Phe Gln Asn Met His 1 10 15

Gln Gly Tyr Pro Lys Glu Thr Leu Val Arg Phe Leu Lys Ala Arg Glu 20 25 30

Trp Asn Val Ala Lys Ala His Lys Met Ile Val Glu Cys Leu Asn Trp 35 40 45

Arg Ile Gln Asn Glu Ile Asp Ser Val Leu Glu Arg Pro Ile Val Pro 50 55 60

Val Asp Leu Tyr Arg Ser Ile Arg Asp Ser Gln Leu Ile Gly Leu Ser 65 70 75 80

Gly Tyr Thr Lys Glu Gly Leu Pro Ile Phe Gly Ile Gly Val Gly His
85 90 95

Ser Thr Tyr Asp Lys Ala Ser Val His Tyr Tyr Val Gln Ser His Ile 100 105 110

Gln Ile Asn Glu Tyr Arg Asp Arg Ile Ile Leu Pro Arg Leu Thr Gln
115 120 125

Gln Phe Gly Arg Pro Val Thr Ser Cys Ile Lys Val Leu Asp Met Thr 130 135 140

Gly Leu Lys Leu Ser Ala Leu Ser Gln Ile Lys Met Leu Thr Ser Ile 145 150 155 160

- (2) INFORMATION FOR SEQ ID NO:3345:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 768 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..768
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576508
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3345:

ttccttccgt attgccacag ccacaccggg ccgcctctcc tcctccctcg gacagggaga 60 gaccetttee atecaageta gecaaaceet agecacegte ggtteeaate tgecaaegte 120 tegteegetg gttggtgget eggeggeatg geetegteeg eetaegeege ttgggaegee 180 qcqqaqqagg cggacatcga cgcctccgca tcgcaggagg agctcatcgg ccgcgcccgc 240 300 gaggtgttca gcacgccgcc tctcacgcat caggacccgc agagtcaggg ggaagaagtc 360 atogtcatgt gctccatccc cttcacccag cctgacccca cccctccccm cgCtcccgct 420 ccctcccctc cctcggacag taagagtcgc cgtccggagc gggtcaaatt gaagccgcgg 480 aagaaggtct gcaagaggaa gagggtctgc aagaggaagg tgagaagagc caacaagatc 540 aggtetecga etecgageeg eageeeegaa etggaeeyte tegeeaggge egtgeteatg 600 660 atcccaaccq etecttetac aatcaccggt ggtgaggata teetegaggt tgetegeage 720 cgcggcatct tctagatcta ctagttgcct gtgtattttg tgcattgtag cgtagtccct tgtgtttctg ccgatcaatc catatgctat ggcctggctg gattttgt

- (2) INFORMATION FOR SEQ ID NO:3346:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 156 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..156
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576509
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3346:
- Ser Phe Arg Ile Ala Thr Ala Thr Pro Gly Arg Leu Ser Ser Leu 1 5 10 15
- Gly Gln Gly Glu Thr Leu Ser Ile Gln Ala Ser Gln Thr Leu Ala Thr 20 25 30
- Val Gly Ser Asn Leu Pro Thr Ser Arg Pro Leu Val Gly Gly Ser Ala 35 40 45
- Ala Trp Pro Arg Pro Pro Thr Pro Leu Gly Thr Pro Arg Arg Arg 50 55 60
- Thr Ser Thr Pro Pro His Arg Arg Ser Ser Ser Ala Ala Pro Ala 65 70 75 80
- Ser Ser Pro Val Thr Met Arg Arg Gly Arg Gly Arg Gly Arg Arg 85 90 95
- Arg Arg Arg Ser Arg Cys Ser Ala Arg Arg Leu Ser Arg Ile Arg Thr
- Arg Arg Val Arg Gly Lys Lys Ser Ser Ser Cys Ala Pro Ser Pro Ser 115 120 125
- Pro Ser Leu Thr Pro Pro Leu Pro Xaa Leu Pro Leu Pro Pro Leu Pro 130 135 140
- Arg Thr Val Arg Val Ala Val Arg Ser Gly Ser Asn 145 150 155
- (2) INFORMATION FOR SEQ ID NO:3347:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..175
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576510
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3347:
- Met Ala Ser Ser Ala Tyr Ala Ala Trp Asp Ala Ala Glu Glu Ala Asp 1 5 10 15
- Ile Asp Ala Ser Ala Ser Gln Glu Glu Leu Ile Gly Arg Ala Arg Phe 20 25 30
- Ile Ser Arg Asp Asn Glu Glu Glu Gly Glu Gly Glu Gly Glu Glu Glu Glu 35 40 45
- Glu Glu Val Glu Val Phe Ser Thr Pro Pro Leu Thr His Gln Asp Pro 50 60
- Gln Ser Gln Gly Glu Glu Val Ile Val Met Cys Ser Ile Pro Phe Thr 65 70 75 80
- Gln Pro Asp Pro Thr Pro Pro Xaa Ala Pro Ala Pro Ser Pro Pro Ser 85 90 95
- Asp Ser Lys Ser Arg Arg Pro Glu Arg Val Lys Leu Lys Pro Arg Lys
- Lys Val Cys Lys Arg Lys Arg Val Cys Lys Arg Lys Val Arg Arg Ala 115 120 125
- Asn Lys Ile Arg Ser Pro Thr Pro Ser Arg Ser Pro Glu Leu Asp Xaa 130 135 140
- Leu Ala Arg Ala Val Leu Met Ile Pro Thr Ala Pro Ser Thr Ile Thr 145 150 155 160
- Gly Gly Glu Asp Ile Leu Glu Val Ala Arg Ser Arg Gly Ile Phe 165 170 175
- (2) INFORMATION FOR SEQ ID NO:3348:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..102
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576511
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3348:

Met Cys Ser Ile Pro Phe Thr Gln Pro Asp Pro Thr Pro Pro Xaa Ala 1 10 15

Pro Ala Pro Ser Pro Pro Ser Asp Ser Lys Ser Arg Arg Pro Glu Arg 20 25 30

Val Lys Leu Lys Pro Arg Lys Lys Val Cys Lys Arg Lys Arg Val Cys
35 40 45

Lys Arg Lys Val Arg Arg Ala Asn Lys Ile Arg Ser Pro Thr Pro Ser 50 60

Arg Ser Pro Glu Leu Asp Xaa Leu Ala Arg Ala Val Leu Met Ile Pro 65 70 75 80

Thr Ala Pro Ser Thr Ile Thr Gly Gly Glu Asp Ile Leu Glu Val Ala 85 90 95

Arg Ser Arg Gly Ile Phe

100

- (2) INFORMATION FOR SEQ ID NO:3349:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 663 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..663
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576523
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3349:

aggtgtgtct agtctctagt ctagctaggc actactctag ctcccaagtg gccaagtata ctcgccagag tacgtagagt gtaGbtgagc gtcgtcgaag gatggcgtGg acytcccgcc 120 gcatggtcgc gtccgcgctc gtcttcctgc tgatgctgct cgccgcctca gagatgggga 180 cgacgaggkt ggcggaggcg aggcactgca cgtcgcagag ccaccggttc gtcggcgcct 240 gcatgagcaa gagcaactgc gagaacgtct gcaggacgga gggcttcccg tggggcgagt 300 gcaggtggca cggcatagag cgcaagtgcc actgcaagcg gatctgctag taattaacta geoggetgge cagegeatge atgeacgaeg accgaectae etgetgetgg teegtttgeg 480 tttgtttctt gtcctttggg ccttgctgtg gcgcgcagtc ttgcgtacgt gcgtgtgcgt 540 gtgtcttttc agttactctc aattagtcat agcagacgtg cgtgggtgcg agcgtgtgtc 600 tegttgcatt gatgaacegg etteaegtge tgtggtttta eagtttetga tgtgttttag ctaatctcga ataataaata ataaggcccc gtcttcacgc agttgcgtac tgggtgctta

- (2) INFORMATION FOR SEQ ID NO:3350:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 82 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..82
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576524
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3350:

Met Ala Trp Xaa Ser Arg Arg Met Val Ala Ser Ala Leu Val Phe Leu 10 Leu Met Leu Leu Ala Ala Ser Glu Met Gly Thr Thr Arg Xaa Ala Glu 20 25 Ala Arg His Cys Thr Ser Gln Ser His Arg Phe Val Gly Ala Cys Met 4.0 Ser Lys Ser Asn Cys Glu Asn Val Cys Arg Thr Glu Gly Phe Pro Trp 55 60 Gly Glu Cys Arg Trp His Gly Ile Glu Arg Lys Cys His Cys Lys Arg 70 Ile Cys

- (2) INFORMATION FOR SEQ ID NO:3351:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 75 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..75
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576525
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3351:

Met Val Ala Ser Ala Leu Val Phe Leu Leu Met Leu Leu Ala Ala Ser 10 5 Glu Met Gly Thr Thr Arg Xaa Ala Glu Ala Arg His Cys Thr Ser Gln

20 Ser His Arg Phe Val Gly Ala Cys Met Ser Lys Ser Asn Cys Glu Asn

25

40 Val Cys Arg Thr Glu Gly Phe Pro Trp Gly Glu Cys Arg Trp His Gly

55 Ile Glu Arg Lys Cys His Cys Lys Arg Ile Cys 70

- (2) INFORMATION FOR SEQ ID NO:3352:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 75 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..75
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576526
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3352:

Met His Ala Arg Arg Pro Thr Tyr Leu Leu Leu Val Arg Leu Arg Leu 10 5

Phe Leu Val Leu Trp Ala Leu Leu Trp Arg Ala Val Leu Arg Thr Cys 25

Val Cys Val Cys Leu Phe Ser Tyr Ser Gln Leu Val Ile Ala Asp Val 40

Arg Gly Cys Glu Arg Val Ser Arg Cys Ile Asp Glu Pro Ala Ser Arg 55

Ala Val Val Leu Gln Phe Leu Met Cys Phe Ser 70

- (2) INFORMATION FOR SEQ ID NO:3353:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 906 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..906
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576535
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3353: ctcqtccaaa accctagccc tcgcgccgcc gccgccgtgc ccagcgctcg arctcctcgc ctgccgcgag ctcgcgccgc aacgccacca tgaagttcaa catcgcgaac ccgtctaccg 120 ggtgccagaa gaagctggaa atcgatgacg accagaaact acgtgccttt tatgaccgaa 180 gatctcccag gaggtcagtg gtgatgctct gggtgaggag tttaagggtt atgtcttcaa 240 300 qatcatqqqt qqatqtqaqc caaqacctat ctgttatcaa cttggtaatt gttaagaagg gtgagaacga tctgcctggt ttaactgaca ctgagaagcc aaggatgagg ggtcccaaaa 360 gggcctccaa gatcaggaag ctgttcaatc ttgcaaagga tgacgacgtg cgcaagtacg 420 tgaacacgta ccgcagGaca ttcactacca agaatggcaa gaaggtgagc aaggcaccta 480 agatccagcg gcttgtgacc cccttgaccc tccagaggaa gcgtgctaga attgctgaca 540 aqaaqaaqaq qatcqctaaq aagaagtctg aggctgctga gtaccagaag cttcttgccc 600 agaggctgaa agaacagagg gaccgccgca gtgagagctt ggccaagagg aggtctaagc 660 720 tttctqccqc cqccaaqqct tctqctqcca cctctqccta agaatgatca gtgctttgag atgttttcaa ggcctatttt gttacagctt ataagtacct tatgctgccc tggctgtgtt 780 840 qcatcagtcg acceteceta ettagactta tgagtaattg ttgcaatttt gtatggacat ggtactggct tgtcgggatt ttttgagtac cagaggtttg atatgttgtt ttattctgtg 900
- (2) INFORMATION FOR SEQ ID NO:3354:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 203 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..203
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576536
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3354:
- Met Lys Phe Asn Ile Ala Asn Pro Ser Thr Gly Cys Gln Lys Leu 1 5 5 10 15 Glu Ile Asp Asp Asp Gln Lys Leu Arg Ala Phe Tyr Asp Arg Arg Ser
- 20 25 30
 Pro Arg Arg Ser Val Val Met Leu Trp Val Arg Ser Leu Arg Val Met
- 35 40 45 Ser Ser Arg Ser Trp Val Asp Val Ser Gln Asp Leu Ser Val Ile Asn
- 50 55 60

 Leu Val Ile Val Lys Lys Gly Glu Asn Asp Leu Pro Gly Leu Thr Asp
 65 70 75 80
- Thr Glu Lys Pro Arg Met Arg Gly Pro Lys Arg Ala Ser Lys Ile Arg 85 90 95
- Lys Leu Phe Asn Leu Ala Lys Asp Asp Asp Val Arg Lys Tyr Val Asn 100 105 110
- Thr Tyr Arg Arg Thr Phe Thr Thr Lys Asn Gly Lys Lys Val Ser Lys 115 120 125
- Ala Pro Lys Ile Gln Arg Leu Val Thr Pro Leu Thr Leu Gln Arg Lys 130 135 140
- 165 170 175

 Arg Asp Arg Arg Ser Glu Ser Leu Ala Lys Arg Arg Ser Lys Leu Ser
 180 185 190
- Ala Ala Ala Lys Ala Ser Ala Ala Thr Ser Ala 195 200

- (2) INFORMATION FOR SEQ ID NO:3355:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 165 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..165
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576537
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3355:

Met Leu Trp Val Arg Ser Leu Arg Val Met Ser Ser Arg Ser Trp Val 1 5 10 15

Asp Val Ser Gln Asp Leu Ser Val Ile Asn Leu Val Ile Val Lys 20 25 30

Gly Glu Asn Asp Leu Pro Gly Leu Thr Asp Thr Glu Lys Pro Arg Met 35 40 45

Arg Gly Pro Lys Arg Ala Ser Lys Ile Arg Lys Leu Phe Asn Leu Ala 50 55 60

Lys Asp Asp Asp Val Arg Lys Tyr Val Asn Thr Tyr Arg Arg Thr Phe 70 75 80

Thr Thr Lys Asn Gly Lys Lys Val Ser Lys Ala Pro Lys Ile Gln Arg
85 90 95

Leu Val Thr Pro Leu Thr Leu Gln Arg Lys Arg Ala Arg Ile Ala Asp 100 105 110

Lys Lys Lys Arg Ile Ala Lys Lys Ser Glu Ala Ala Glu Tyr Gln
115 120 125

Lys Leu Leu Ala Gln Arg Leu Lys Glu Gln Arg Asp Arg Arg Ser Glu
130
135
140

Ser Leu Ala Lys Arg Arg Ser Lys Leu Ser Ala Ala Ala Lys Ala Ser 145 150 155 160

Ala Ala Thr Ser Ala

165

- (2) INFORMATION FOR SEQ ID NO:3356:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 156 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..156
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576538
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3356:

Met Ser Ser Arg Ser Trp Val Asp Val Ser Gln Asp Leu Ser Val Ile 1 5 10 15

Asn Leu Val Ile Val Lys Lys Gly Glu Asn Asp Leu Pro Gly Leu Thr

Asp Thr Glu Lys Pro Arg Met Arg Gly Pro Lys Arg Ala Ser Lys Ile 35 40 45

Arg Lys Leu Phe Asn Leu Ala Lys Asp Asp Asp Val Arg Lys Tyr Val 50 55 60

Asn Thr Tyr Arg Arg Thr Phe Thr Thr Lys Asn Gly Lys Lys Val Ser 65 70 75 80

Lys Ala Pro Lys Ile Gln Arg Leu Val Thr Pro Leu Thr Leu Gln Arg
85 90 95

Lys Arg Ala Arg Ile Ala Asp Lys Lys Lys Arg Ile Ala Lys Lys Lys 100 105 110

Ser Glu Ala Ala Glu Tyr Gln Lys Leu Leu Ala Gln Arg Leu Lys Glu

120 125 115 Gln Arg Asp Arg Arg Ser Glu Ser Leu Ala Lys Arg Arg Ser Lys Leu 135 140 Ser Ala Ala Ala Lys Ala Ser Ala Ala Thr Ser Ala 150 145 (2) INFORMATION FOR SEQ ID NO:3357: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 782 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..782 (D) OTHER INFORMATION: / Ceres Seq. ID 1576543 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3357: agtgggtcgt ccactgtgac gtgaagccgg agaacatact tctgacccgg gatttcgatg ccaagatagc agactttggg ctggccaagc tcgcgaacaa gggagcacta gtctgaactt 120 cacccatatg agaggcacca tgggctacat ggcgccggaa tgggcgctca actcgccgat carcgcgaag gttgatgtgt acarctacgg ggtcrtgstt ctrgagatcg tractgggat 240 carggetteg artggeatag tgctagatga gagRgcagat agactttegg cagtttgtac 300 aggaggetaa geatateetg tetaetggga gtgteagtga tategttgat gatagattge 360 aaggccattt tcacgcggac caagcggttg cgatggtcaa aatagccttt tcatgcctcg 420 aggaaagacg caagaggcca acgatggatg agattgtcaa ggtgctcatg tcgtgtggtg 480 540 atgacgatga ctaccatcct gcttattcat attgacttgc aacagatgtg aaggtttccc 600 aaaagaaaac agatgcaaag atttgagagg cagaggcaag tgtacctttg atcaatgata 660 gaagctgaac tgaactgact gatgaaatat attcgaaagc gtgccaaatt gtgatatttg tgtagagtat gttggggtat ctccatatct ggtagattaa aattgagtaa tgttgttttg 720 ctctatttct aagggaggtg tcttgcccta taagtggaat actataatat tctctccgtt 780 (2) INFORMATION FOR SEQ ID NO:3358: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 60 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..60 (D) OTHER INFORMATION: / Ceres Seq. ID 1576544 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3358: Met Arg Gly Thr Met Gly Tyr Met Ala Pro Glu Trp Ala Leu Asn Ser Pro Ile Xaa Ala Lys Val Asp Val Tyr Xaa Tyr Gly Val Xaa Xaa Xaa 25 20 Glu Ile Xaa Thr Gly Ile Xaa Ala Ser Xaa Gly Ile Val Leu Asp Glu 40 Xaa Ala Asp Arg Leu Ser Ala Val Cys Thr Gly Gly 55 (2) INFORMATION FOR SEQ ID NO:3359: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 56 amino acids (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..56

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576545
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3359:
Met Gly Tyr Met Ala Pro Glu Trp Ala Leu Asn Ser Pro Ile Xaa Ala
                                    10
Lys Val Asp Val Tyr Xaa Tyr Gly Val Xaa Xaa Xaa Glu Ile Xaa Thr
                                25
            20
Gly Ile Xaa Ala Ser Xaa Gly Ile Val Leu Asp Glu Xaa Ala Asp Arg
                            40
Leu Ser Ala Val Cys Thr Gly Gly
                        55
(2) INFORMATION FOR SEQ ID NO:3360:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 82 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..82
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576546
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3360:
Met Arg Xaa Gln Ile Asp Phe Arg Gln Phe Val Gln Glu Ala Lys His
                5
                                     10
Ile Leu Ser Thr Gly Ser Val Ser Asp Ile Val Asp Asp Arg Leu Gln
                                                     30
                                25
Gly His Phe His Ala Asp Gln Ala Val Ala Met Val Lys Ile Ala Phe
                                                 45
                            40
Ser Cys Leu Glu Glu Arg Arg Lys Arg Pro Thr Met Asp Glu Ile Val
                        55
                                             60
Lys Val Leu Met Ser Cys Gly Asp Asp Asp Asp Tyr His Pro Ala Tyr
                                         75
                    70
65
Ser Tyr
(2) INFORMATION FOR SEQ ID NO:3361:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 746 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
           (B) LOCATION: 1..746
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576564
```

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3361: gccgtgtgca tagcagcaaa tagtggtcgg cctgttggta ctctatatcg tcccttccag 60 tgtacccgtc ctccagccca ttatacatca tacttgctcc agataagacc aagagcatca 120 tggccaacgc cttgcctctc atcgtcgcgc tggtcgccgc cgccgggtgc gcggcgctgg 180 cttcggccac gtcgtacacc gtcggcgact cgcagggctg gacgaccacc ggcgtcgact 240 acagcagctg ggccagccgc aacactttcg tcgtcggaga cacactagtg ttcaactacg 300 tgagcaaggc gcacacggtg acggaggtga gcaaggccgg ctacgacgcc tgctccggcg 360 ccaacgcgct cagcgacgac gacaccggct ccaccaccat cacgctccag accccgggca 420 cgcactattt catctgcaac gtccccggcc actgcgccaG cggcatgaag ctagcggtcg 480 ccgtctccgc ctcgccctcg ggcacggccc cttccaccgg agccctgcag gttccggcga 540 tggcatccgt cgtcgcgcgg ccgcgggcgc tgccatcaag ctcgcgctct tctgacggag 600 cacggccggg tcgtctcagg ggagagacag tgcatgcaga ctacgttctt ggcggttgat 660 agtttcccgc tggcgattgt tcgccgcgca gttcatgtac gtatgtatgt gtgtatgcta 720
- (2) INFORMATION FOR SEQ ID NO:3362:

ctctqcqqtg gcgaatgctt tttctg

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..95
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576565
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3362:

Ala Val Cys Ile Ala Ala Asn Ser Gly Arg Pro Val Gly Thr Leu Tyr 1 5 10 15

Arg Pro Phe Gln Cys Thr Arg Pro Pro Ala His Tyr Thr Ser Tyr Leu 20 25 30

Leu Gln Ile Arg Pro Arg Ala Ser Trp Pro Thr Pro Cys Leu Ser Ser 35 40 45

Ser Arg Trp Ser Pro Pro Pro Gly Ala Arg Arg Trp Leu Arg Pro Arg 50 55 60

Arg Thr Pro Ser Ala Thr Arg Arg Ala Gly Arg Pro Pro Ala Ser Thr 65 70 75 80

Thr Ala Ala Gly Pro Ala Ala Thr Leu Ser Ser Ser Glu Thr His 85 90 95

- (2) INFORMATION FOR SEQ ID NO:3363:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 179 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..179
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576566
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3363:

Met Ala Asn Ala Leu Pro Leu Ile Val Ala Leu Val Ala Ala Ala Gly
1 5 10 15

Cys Ala Ala Leu Ala Ser Ala Thr Ser Tyr Thr Val Gly Asp Ser Gln
20 25 30

Gly Trp Thr Thr Gly Val Asp Tyr Ser Ser Trp Ala Ser Arg Asn 35 40 45

Thr Phe Val Val Gly Asp Thr Leu Val Phe Asn Tyr Val Ser Lys Ala 50 60

His Thr Val Thr Glu Val Ser Lys Ala Gly Tyr Asp Ala Cys Ser Gly 65 70 75 80

Ala Asn Ala Leu Ser Asp Asp Asp Thr Gly Ser Thr Thr Ile Thr Leu 85 90 95
Gln Thr Pro Gly Thr His Tyr Phe Ile Cys Asn Val Pro Gly His Cys

100 105 110 Ala Ser Gly Met Lys Leu Ala Val Ala Val Ser Ala Ser Pro Ser Gly

115 120 125 Thr Ala Pro Ser Thr Gly Ala Leu Gln Val Pro Ala Met Ala Ser Val

Thr Ala Pro Ser Thr Gly Ala Leu Gin vai Pro Ala Met Ala Sei vai 130 135 140

Val Ala Arg Pro Arg Ala Leu Pro Ser Ser Ser Arg Ser Ser Asp Gly
145 150 160

Ala Arg Pro Gly Arg Leu Arg Gly Glu Thr Val His Ala Asp Tyr Val
165 170 175

Leu Gly Gly

- (2) INFORMATION FOR SEQ ID NO:3364:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 782 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..782
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576575
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3364:

	, ,		gtccccgatg	gcgatcatgg	cggccaccgc	cactgccgtg	60
			ctcgccaggt				120
			ctgccatctc				180
			ggccgtcggc				240
			gtccaaggtc				300
	ccgcgtccac	cacgttgcca	aggcgcccgg	cctggacctg	cgcggcatgg	agggcgtcgt	360
			ggaaggggaa				420
	ggagttcgag	ctcaagctgg	acggccatga	caagccggtc	cggttcatca	cccacctccg	480
	cgagcaagag	ttcgagatcc	tcggggagga	atagagctct	ggactagaga	ataacgcgct	540
	ctcatcggcg	gctgtggcat	ctgtatacta	ttgtgtctgc	gctaaagaag	aacgtggtcg	600
	agggtgcggg	gagaatagga	gattgcaact	ttgctagtaa	gttcctgttt	gtttgcttat	660
			ctccaccctt				720
	aggaattgtt	cgattgttga	tacttatgat	ccaaagtaat	taaactgagg	aatctgttca	780
	ac						

- (2) INFORMATION FOR SEQ ID NO:3365:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 149 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..149
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576576
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3365:

Thr Arg Pro Pro Thr Phe Pro Ser Pro Met Ala Ile Met Ala Ala Thr 1 5 10 15

Ala Thr Ala Val Ala Ser Pro Ser Ser Ser Thr Ser Pro Gly Pro Leu 20 25 30

Gln Pro Ser Pro Arg Phe Leu Pro Pro Val Ser Thr Pro Ala Arg Cys 35 40 45

His Leu Leu Pro Lys Pro Arg Arg Trp Cys Ala Arg Leu His Ile Glu 50 55 60
Arg Arg Val Ala Val Gly Ser Asp Val Ser Ser Ser His Asp Val Ala

65 70 75 80 Xaa Glu Glu Ala Ala Ala Ala Ser Lys Val Gly Lys Xaa Val Arg Val

85 90 95

Xaa Gly Ala Arg Pro Arg Pro Pro Arg Cys Gln Gly Ala Arg Pro Gly
100 105 110

Pro Ala Arg His Gly Gly Arg Arg Gln Ala Val His Arg Arg Leu Glu 115 120 125

Gly Glu Ala His His Gly Gln Ser Pro Leu Gln Gly Gly Val Arg Ala 130 135 140

Gln Ala Gly Arg Pro

145

- (2) INFORMATION FOR SEQ ID NO:3366:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 170 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..170
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576577
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3366:
- Leu Ala His Gln Pro Ser Arg Pro Arg Trp Arg Ser Trp Arg Pro Pro 1 5 10 15
- Pro Leu Pro Trp Leu Pro Pro Pro Ala Pro Pro Arg Gln Val Pro Ser 20 25 30
- Asn Pro Ala Pro Ala Ser Ser Leu Pro Ser Pro Arg Pro Leu Ala Ala 35 40 45
- Ile Ser Ser Pro Ser Arg Gly Gly Gly Ala Arg Ala Ser Thr Ser Ser 50 55 60
- Val Gly Trp Pro Ser Ala Ala Thr Cys Pro Arg Pro Met Thr Trp Leu 65 70 75 80
- Xaa Arg Arg Pro Leu Leu Arg Pro Arg Ser Gly Ser Xaa Cys Ala Xaa 85 90 95
- Thr Val Pro Val Arg Val His His Val Ala Lys Ala Pro Gly Leu Asp 100 105 110
- Leu Arg Gly Met Glu Gly Val Val Lys Gln Tyr Ile Gly Val Trp Lys
- 115 120 125

 Gly Lys Arg Ile Thr Ala Asn Leu Pro Phe Lys Val Glu Phe Glu Leu
 130 135 140
- Lys Leu Asp Gly His Asp Lys Pro Val Arg Phe Ile Thr His Leu Arg 145 150 155 160
- Glu Gln Glu Phe Glu Ile Leu Gly Glu Glu 165 170
- (2) INFORMATION FOR SEQ ID NO:3367:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 140 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..140
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576578
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3367:
- Met Ala Ile Met Ala Ala Thr Ala Thr Ala Val Ala Ser Pro Ser Ser 1 10 15
- Ser Thr Ser Pro Gly Pro Leu Gln Pro Ser Pro Arg Phe Leu Pro Pro 20 25 30
- Val Ser Thr Pro Ala Arg Cys His Leu Leu Pro Lys Pro Arg Arg Trp 35 40 45
- Cys Ala Arg Leu His Ile Glu Arg Arg Val Ala Val Gly Ser Asp Val 50 55 60
 Ser Ser Ser His Asp Val Ala Xaa Glu Glu Ala Ala Ala Ala Ser Lys
- 65 70 75 80
 Val Gly Lys Xaa Val Arg Val Xaa Gly Ala Arg Pro Arg Pro Pro Arg
- Val Gly Lys Xaa Val Arg Val Xaa Gly Ala Arg Flo Arg Flo Arg
- Cys Gln Gly Ala Arg Pro Gly Pro Ala Arg His Gly Gly Arg Arg Gln

 100

 105

 110
- Ala Val His Arg Arg Leu Glu Gly Glu Ala His His Gly Gln Ser Pro \$115\$ Leu Gln Gly Gly Val Arg Ala Gln Ala Gly Arg Pro
- 130 135
 (2) INFORMATION FOR SEQ ID NO:3368:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 810 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..810
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576582
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3368: acaggcaagc atctggccac atgtgcactc acacgactca gggcgagagg acagcagggc acaataaccg ttccactttg gtccatagga gcgcatagca cagcacaagg agaggccgag 120 180 aagegettta geegtageeg tagegataag agtgagetag etggtgeaca eeggeatgge ggccacggcg tactccgtgg cgctcctcgg cggcgcgcgc ctccccgccg ctccgcgctc 240 cgccctcctc cctcggcgcr sgtctgccag Cttcgcttcc aagatgcacc gaggctctcc 300 ctgctccgtg cgaaggccgc ttccgaggac acatcggcCt ccggcgacga gttgatcgag 360 gacctcaaag cgaagtggga cgccgttgag gacaagccca ccgtcctctt gtacggcggc 420 ggcgcCgtcg tcgccctatg gctgacgtcc gtggtcgtgg gcgccatcaa cgccgtgccg 480 ctgctcccca agatectgga gctcgttggg ctcggctaca ccggctggtt cgtgtaccgc 540 taccttctct ttaaggaaag caggaaagag ttggccgccg acattgagac cttgaagaaa 600 aaaatagctg gaacagaata aacgctcatg gaaagtttta gagcgtcctt tettetttgg 660 aaagagatct attcgatcgg agaaccaata tgcaactact tgagtactat tattgcccat 720 gtattgtgtg ctgtatatct tctgtataca aaggaaggtt cgtttgttat gtacgtagta 780
- gcattgtagt ttaaatgtat cgtattacct
 (2) INFORMATION FOR SEQ ID NO:3369:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 206 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..206
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576583
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3369:
- Thr Gly Lys His Leu Ala Thr Cys Ala Leu Thr Arg Leu Arg Ala Arg 1 5 10 15 Gly Gln Gln Gly Thr Ile Thr Val Pro Leu Trp Ser Ile Gly Ala His
- 20 25 30

 Ser Thr Ala Gln Gly Glu Ala Glu Lys Arg Phe Ser Arg Ser Arg Ser
- 35 40 45
 Asp Lys Ser Glu Leu Ala Gly Ala His Arg His Gly Gly His Gly Val
- 50 55 60

 Leu Arg Gly Ala Pro Arg Arg Arg Ala Pro Pro Arg Arg Ser Ala Leu
 65 70 75 80
- Arg Pro Pro Pro Ser Ala Xaa Val Cys Gln Leu Arg Phe Gln Asp Ala 85 90 95
- Pro Arg Leu Ser Leu Leu Arg Ala Lys Ala Ala Ser Glu Asp Thr Ser
- Ala Ser Gly Asp Glu Leu Ile Glu Asp Leu Lys Ala Lys Trp Asp Ala 115 120 125
- Val Glu Asp Lys Pro Thr Val Leu Leu Tyr Gly Gly Gly Ala Val Val
- Leu Leu Pro Lys Ile Leu Glu Leu Val Gly Leu Gly Tyr Thr Gly Trp 165 170 175
- Phe Val Tyr Arg Tyr Leu Leu Phe Lys Glu Ser Arg Lys Glu Leu Ala
 180 185 190
- Ala Asp Ile Glu Thr Leu Lys Lys Lys Ile Ala Gly Thr Glu 195 200 205

120

- (2) INFORMATION FOR SEQ ID NO:3370:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 461 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..461
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576592
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3370: aactcagatt cagtacaagc tcaagccagg cacacagcaa gacatcgacc atggctgcct accaacaagc tcccgctctc ctgtgcgcct gcctgatgct cgtgctcatg gcgggcgcgg

catcoggegg cogogtagac gtggaagaca tgctgatgat ggacoggtto cgcgcgtggc 180
aagccacgta caaccgctcg tacctgaccg cogoggagyg Tctgcgccgg ttcgaggtgt 240
accgccagaa catggagctc atcgaggcca cgaaccgccg cgccgagctc tcgtaccagc 300
tcggcgagac cccgttcacc gacctcacca gcgaggagtt cctcgccaca cacaccatgt 360
ccacgcgcct gcatgcgtcc gaggccgctc ggcggcaccg ggagctcatc acgacgcacg 420

caggccccgt cagcgacgGc ggtcgcCagt ggaaccggcg g

- (2) INFORMATION FOR SEQ ID NO:3371:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 153 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..153
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576593
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3371:

Thr Gln Ile Gln Tyr Lys Leu Lys Pro Gly Thr Gln Gln Asp Ile Asp 1 10 15

His Gly Cys Leu Pro Thr Ser Ser Arg Ser Pro Val Arg Leu Pro Asp 20 25 30

Ala Arg Ala His Gly Gly Arg Gly Ile Arg Arg Pro Arg Arg Arg Gly 35 40 45

Arg His Ala Asp Asp Gly Pro Val Pro Arg Val Ala Ser His Val Gln

Pro Leu Val Pro Asp Arg Arg Gly Xaa Ser Ala Pro Val Arg Gly Val 65 70 75 80

Pro Pro Glu His Gly Ala His Arg Gly His Glu Pro Pro Arg Arg Ala 85 90 95

Leu Val Pro Ala Arg Arg Asp Pro Val His Arg Pro His Gln Arg Gly
100 105 110

Val Pro Arg His Thr His His Val His Ala Pro Ala Cys Val Arg Gly
115 120 125

Arg Ser Ala Ala Pro Gly Ala His His Asp Ala Arg Arg Pro Arg Gln
130 140

Arg Arg Arg Ser Pro Val Glu Pro Ala 145

- (2) INFORMATION FOR SEQ ID NO:3372:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 153 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..153
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576594
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3372:

Leu Arg Phe Ser Thr Ser Ser Ser Gln Ala His Ser Lys Thr Ser Thr 1 10 15

Met Ala Ala Tyr Gln Gln Ala Pro Ala Leu Leu Cys Ala Cys Leu Met 20 25 30

Leu Val Leu Met Ala Gly Ala Ala Ser Gly Gly Arg Val Asp Val Glu 35 40 45

Asp Met Leu Met Met Asp Arg Phe Arg Ala Trp Gln Ala Thr Tyr Asn 50 55 60

Arg Ser Tyr Leu Thr Ala Ala Glu Xaa Leu Arg Arg Phe Glu Val Tyr 65 70 75 80

Arg Gln Asn Met Glu Leu Ile Glu Ala Thr Asn Arg Arg Ala Glu Leu 85 90 95

Ser Tyr Gln Leu Gly Glu Thr Pro Phe Thr Asp Leu Thr Ser Glu Glu
100 105 110

Phe Leu Ala Thr His Thr Met Ser Thr Arg Leu His Ala Ser Glu Ala 115 120 125

Ala Arg Arg His Arg Glu Leu Ile Thr Thr His Ala Gly Pro Val Ser 130 135 140

Asp Gly Gly Arg Gln Trp Asn Arg Arg 145 150

- (2) INFORMATION FOR SEQ ID NO:3373:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 137 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..137
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576595
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3373:

Met Ala Ala Tyr Gln Gln Ala Pro Ala Leu Leu Cys Ala Cys Leu Met 1 5 10

Leu Val Leu Met Ala Gly Ala Ala Ser Gly Gly Arg Val Asp Val Glu 20 25 30

Asp Met Leu Met Met Asp Arg Phe Arg Ala Trp Gln Ala Thr Tyr Asn 35 40 45

Arg Ser Tyr Leu Thr Ala Ala Glu Xaa Leu Arg Arg Phe Glu Val Tyr 50 55 60

Arg Gln Asn Met Glu Leu Ile Glu Ala Thr Asn Arg Arg Ala Glu Leu 65 70 75 80

Ser Tyr Gln Leu Gly Glu Thr Pro Phe Thr Asp Leu Thr Ser Glu Glu 85 90 95

Phe Leu Ala Thr His Thr Met Ser Thr Arg Leu His Ala Ser Glu Ala 100 105 110 Ala Arg Arg His Arg Glu Leu Ile Thr Thr His Ala Gly Pro Val Ser

115 120 Asp Gly Gly Arg Gln Trp Asn Arg Arg

- 130 135 (2) INFORMATION FOR SEQ ID NO:3374:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 677 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..677
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576618
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3374: 60 aattgcgatt gcgagtcctc caaaccatgg cgctcgccct ggcctctcca atggcgtctc teteetteea eteeggagg ateteggegg egtetategg aggegtegge egeaetegea 120 aggegeece gatagGegta tecqcetege egtteCteeg gageteette gtetegteet 180 catecacqte qtecqcatec geatecqcat covecqctte gateqcqqqq gatqtateqqq 240 cqtctctqqc atttacqtcc tcctccqcqt ttqcqqqttc atctttqqqa atcqaqttca 300 360 qctacaqtat aatqacaaca cggagatccc gtggtatgca gattagggct ggaaaggctg ccctctgcat gaccaagagg tcaaggtcta ggaagtcact tgcccgtaca catggtttcc 420 gcagGcggat gcggactact tctggaagga aggtactgaa gCgcaggcgc gccaaaggca 480 ggaaggttct ttgcacaagg acaaactcaa acagtgggaa gaaaagaatg ttctaattac 540 actgcaattt gatgtgctcg caactgtaag tgtaatgtct acttgcaatc ttctaaqccq 600 ccatctatgt gtaacaatca tgtagcatcc tattcctgtt taattggtta aaaatatctg 660 gatcaccttc tgcttcc
- (2) INFORMATION FOR SEQ ID NO:3375:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 177 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..177
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576619
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3375: Leu Arg Leu Arg Val Leu Gln Thr Met Ala Leu Ala Leu Ala Ser Pro 10 5 Met Ala Ser Leu Ser Phe His Ser Gly Arg Ile Ser Ala Ala Ser Ile 30 25 20 Gly Gly Val Gly Arg Thr Arg Arg Ala Ala Pro Val Gly Val Ser Ala 4.5 40 Ser Pro Phe Leu Arg Ser Ser Phe Val Ser Ser Ser Ser Thr Ser Ser 60 55 Ala Ser Ala Ser Ala Ser Xaa Ala Ser Leu Ala Ala Ala Val Ser Ala 75 70 Ser Leu Ala Phe Thr Ser Ser Ser Ala Phe Ala Gly Ser Ser Leu Gly 8.5 90 Ile Glu Phe Ser Tyr Ser Ile Met Thr Thr Arg Arg Ser Arg Gly Met 105 110 100 Gln Ile Arg Ala Gly Lys Ala Ala Leu Cys Met Thr Lys Arg Ser Arg

125 120 Ser Arg Lys Ser Leu Ala Arg Thr His Gly Phe Arg Arg Arg Met Arg

135 140

Thr Thr Ser Gly Arg Lys Val Leu Lys Arg Arg Arg Ala Lys Gly Arg 150 155

Lys Val Leu Cys Thr Arg Thr Asn Ser Asn Ser Gly Lys Lys Arg Met 170 165

Phe

- (2) INFORMATION FOR SEQ ID NO:3376:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 169 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..169
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576620

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3376:

Met Ala Leu Ala Leu Ala Ser Pro Met Ala Ser Leu Ser Phe His Ser

1 10 15

Gly Arg Ile Ser Ala Ala Ser Ile Gly Gly Val Gly Arg Thr Arg Arg
20 25 30

Ala Ala Pro Val Gly Val Ser Ala Ser Pro Phe Leu Arg Ser Ser Phe 35 40 45

Val Ser Ser Ser Ser Thr Ser Ser Ala Ser Ala Ser Ala Ser Xaa Ala 50 55 60

Ser Leu Ala Ala Ala Val Ser Ala Ser Leu Ala Phe Thr Ser Ser Ser 65 70 75 80

Ala Phe Ala Gly Ser Ser Leu Gly Ile Glu Phe Ser Tyr Ser Ile Met
85 90 95

Thr Thr Arg Arg Ser Arg Gly Met Gln Ile Arg Ala Gly Lys Ala Ala 100 105 110

Leu Cys Met Thr Lys Arg Ser Arg Ser Arg Lys Ser Leu Ala Arg Thr 115 120 125

His Gly Phe Arg Arg Arg Met Arg Thr Thr Ser Gly Arg Lys Val Leu 130 135 140

Lys Arg Arg Arg Ala Lys Gly Arg Lys Val Leu Cys Thr Arg Thr Asn 145 150 155 160

Ser Asn Ser Gly Lys Lys Arg Met Phe 165

- (2) INFORMATION FOR SEQ ID NO:3377:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 161 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..161
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576621

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3377:

Met Ala Ser Leu Ser Phe His Ser Gly Arg Ile Ser Ala Ala Ser Ile 1 5 10 15 Gly Gly Val Gly Arg Thr Arg Arg Ala Ala Pro Val Gly Val Ser Ala

Gly Gly Val Gly Arg Thr Arg Arg Ala Ala Pro Val Gly Val Ser Ala
20 25 30

Ser Pro Phe Leu Arg Ser Ser Phe Val Ser Ser Ser Ser Thr Ser Ser 35 40 45
Ala Ser Ala Ser Ala Ser Xaa Ala Ser Leu Ala Ala Val Ser Ala

50 55 60
Ser Leu Ala Phe Thr Ser Ser Ser Ala Phe Ala Gly Ser Ser Leu Gly

65 70 75 80

Ile Glu Phe Ser Tyr Ser Ile Met Thr Thr Arg Arg Ser Arg Gly Met

85 90 95

Gln Ile Arg Ala Gly Lys Ala Ala Leu Cys Met Thr Lys Arg Ser Arg
100 105 110

Ser Arg Lys Ser Leu Ala Arg Thr His Gly Phe Arg Arg Met Arg 115 120 125

Thr Thr Ser Gly Arg Lys Val Leu Lys Arg Arg Arg Ala Lys Gly Arg 130 135 140

Lys Val Leu Cys Thr Arg Thr Asn Ser Asn Ser Gly Lys Lys Arg Met 145 150 155 160
Phe

- (2) INFORMATION FOR SEQ ID NO:3378:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..479
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576636
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3378: 60 attgcccqtt qtqctctctc tctctattcq ttccccqcct camcccgagc cagccgtctc gctagggttt cgccgccgcc gccgccgccg ccgccgctat gcctcgccgc agctcaggcg 120 cggcaaatgg caggcggcag ggttgcacat gctaccctca agggccccag cgtggtgaag 180 240 qaqatcttca ttggactgac cctGgggtct gatcgctgga ggtatgtgga agatgcacca ctggaacgag cagaggaaaa ctagatcctt ctacgacatg cttgacaagg gccagatcgt 300 cgtcgtcgag gagtagttcc cacgtgtcac ctcagaagtt tttttttcc agttgtttt 360 420 qaaaactcac tctqqaqaqc acgacaaagt gaatgctgtg gagatttggc ttgaaaataa gcataaccat ttgagaacac cagcttctgt tgaattgtct tttcttgtca tgactattt
- (2) INFORMATION FOR SEQ ID NO:3379:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 87 amino acids
 (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..87
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576637
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3379:

Val Ala Arg Cys Ala Leu Ser Leu Tyr Ser Phe Pro Ala Ser Xaa Arg 1 5 10 15

Leu Cys Leu Ala Ala Ala Gl
n Ala Arg Gl
n Met Ala Gly Gly Arg Val\$35\$ 40 45

Ala His Ala Thr Leu Lys Gly Pro Ser Val Val Lys Glu Ile Phe Ile 50 55 60

Gly Leu Thr Leu Gly Ser Asp Arg Trp Arg Tyr Val Glu Asp Ala Pro 65 70 75 80

Leu Glu Arg Ala Glu Glu Asn

85

- (2) INFORMATION FOR SEQ ID NO:3380:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..58
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576638
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3380:

Leu Pro Val Val Leu Ser Leu Ser Ile Arg Ser Pro Pro Xaa Pro Glu

1 5 10 15

Pro Ala Val Ser Leu Gly Phe Arg Arg Arg Arg Arg Arg Arg Arg Arg 20 25 30

Tyr Ala Ser Pro Gln Leu Arg Arg Gly Lys Trp Gln Ala Ala Gly Leu

His Met Leu Pro Ser Arg Ala Pro Ala Trp

50 55 (2) INFORMATION FOR SEQ ID NO:3381: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 45 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..45 (D) OTHER INFORMATION: / Ceres Seq. ID 1576639 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3381: Met Ala Gly Gly Arg Val Ala His Ala Thr Leu Lys Gly Pro Ser Val 10 Val Lys Glu Ile Phe Ile Gly Leu Thr Leu Gly Ser Asp Arg Trp Arg 25 20 Tyr Val Glu Asp Ala Pro Leu Glu Arg Ala Glu Glu Asn 40 35 (2) INFORMATION FOR SEQ ID NO:3382: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 719 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..719 (D) OTHER INFORMATION: / Ceres Seq. ID 1576648 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3382: cgaacgcgat ctgttcccca acctccgcag ccgctccacc gtcctccact ccggctgccg aatcgacccg ccccgatcca gatcaggagc tgagggatgg acgcgaacag gcgccagagt 180 gggatccagc agttgctggc tgcggaScag gaggctcagc aaattgtgaa tgccCgctag 240 agctgccaag tcagcgaggc tcaggcaagc aaaagaggag gctgagcggg aaatagccga 300 ataccgtgcc cagatggagg ctgagtttca gaggaaggtt gcagagagca gcggcgactc cggtgcaaac gtcaagcgtc tcgaggaaga aacggcggcg aagatcgagc aactcaccca 420 gcaggccgca agcatctccc cggatgtcat tcagatgctt ctgcggcatg tcaccaccgt 480 caagaactga ggagtgctgt tcccgaacta tgctcgcaga cttgtaccgt cgatctattt 540 atttttgtca agagtgagag tggtgaggaa taatatgccc gcttgtatcc ataattcctg 600 ttcgtaacta cggaataagc cgccgcagct ttagcggcaa acgtgactag tactgtcaga acctaccatt gttatttggt acaattggta aataatattg ttttaaactg gattttcg (2) INFORMATION FOR SEQ ID NO:3383: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 75 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..75 (D) OTHER INFORMATION: / Ceres Seq. ID 1576649 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3383: Leu Tyr Met Arg Ile Ser Ile His Gln Ser Pro Ser Cys Arg Pro Pro 10 Ala Arg Leu Gly Glu Arg Asp Leu Phe Pro Asn Leu Arg Ser Arg Ser 25 Thr Val Leu His Ser Gly Cys Arg Ile Asp Pro Pro Arg Ser Arg Ser 45 40

Gly Ala Glu Gly Trp Thr Arg Thr Gly Ala Arg Val Gly Ser Ser Ser 50 60

Cys Trp Leu Arg Xaa Arg Arg Leu Ser Lys Leu 65 70 75

- (2) INFORMATION FOR SEQ ID NO:3384:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 97 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..97
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576650

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3384:

Cys Ile Cys Gly Ser Pro Phe Thr Asn Arg Leu Pro Val Ala Leu Pro 1 5 10 15

Leu Gly Ser Ala Asn Ala Ile Cys Ser Pro Thr Ser Ala Ala Pro 20 25 30

Pro Ser Ser Thr Pro Ala Ala Glu Ser Thr Arg Pro Asp Pro Asp Gln 35 40 45

Glu Leu Arg Asp Gly Arg Glu Gln Ala Pro Glu Trp Asp Pro Ala Val 50 55 60

Ala Gly Cys Gly Xaa Gly Gly Ser Ala Asn Cys Glu Cys Pro Leu Glu 65 70 75 80

Leu Pro Ser Gln Arg Gly Ser Gly Lys Gln Lys Arg Arg Leu Ser Gly 85 90 95

Lys

- (2) INFORMATION FOR SEQ ID NO:3385:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 86 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..86
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576651
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3385:

Met Pro Ala Arg Ala Ala Lys Ser Ala Arg Leu Arg Gln Ala Lys Glu 1 5 10

Glu Ala Glu Arg Glu Ile Ala Glu Tyr Arg Ala Gln Met Glu Ala Glu
20 25 30

Phe Gln Arg Lys Val Ala Glu Ser Ser Gly Asp Ser Gly Ala As
 Val 35 40 45

Lys Arg Leu Glu Glu Glu Thr Ala Ala Lys Ile Glu Gln Leu Thr Gln 50 55 60

Gln Ala Ala Ser Ile Ser Pro Asp Val Ile Gln Met Leu Leu Arg His 65 70 75 80

Val Thr Thr Val Lys Asn 85

- (2) INFORMATION FOR SEQ ID NO:3386:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 756 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)

(ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..756
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576665
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3386: 60 ataggqttct aagcctcggc cgtttcttcg tctccacagc tcccgccgcc gcggaccagc 120 qcqtcactct accqqqttcc qqcqtctccc cgtacccgta gcgcggcatc catggcggas agacggaaag ggctttcttg aagcagccca aggtgtttct ctgttccaag aaggccacca 180 240 aggtaaacaa acctggcaag ggaggaaaca gattctggaa gaacattggc cttggtttca 300 agacacccaq qqaaqccatt qaaqqaacct acattgataa gaagtgtcca ttcaccggca ctgtgtctat caggggtcgc atcatcgccg gaacatgcca cagtgctaag atgaatagga 360 420 ccatcattqt tcqtaggaat tatcttcact tcqtcaagaa gtaccagagg tatgagaaga gacactccaa catccctgcg cacatttcac catgcttccg tgtcaaggaa ggagatcatg 480 tgatcattgg ccagtgcagg ccagtgtcga agactgNtaa ggttcaatgt ggtcaaagtt 540 attectgcag gttcgaagag tggagcagtg aagaaagett teactgcege ttaagateat 600 gacgagttca tcatccatgg cccggaaaag ctctgtgtta taacgttttg atgctgccta 660 ttagcctttt tccccgtaac tactatatgt gtacttggaa ttggacttga attacatcca 720 gaacttgaaa tootgaaaaa aaatcataac cotttg
- (2) INFORMATION FOR SEQ ID NO:3387:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 83 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..83
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576666
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3387: Met Asn Arg Thr Ile Ile Val Arg Asn Tyr Leu His Phe Val Lys

1 5 10 15 Lys Tyr Gln Arg Tyr Glu Lys Arg His Ser Asn Ile Pro Ala His Ile

20 25 30 Ser Pro Cys Phe Arg Val Lys Glu Gly Asp His Val Ile Ile Gly Gln

35 40 45
Cys Arg Pro Val Ser Lys Thr Xaa Lys Val Gln Cys Gly Gln Ser Tyr

50 55 60

Ser Cys Arg Phe Glu Glu Trp Ser Ser Glu Glu Ser Phe His Cys Arg
65 70 75 80

Leu Arg Ser

- (2) INFORMATION FOR SEQ ID NO:3388:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1034 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1034
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576671
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3388:

gtgtctctta	tttctttgtg	tgtttggttg	ctggaaaggg	agtggacttt	tacaacttct	60
catgtcccta	ttgttgggag	ggttcggagt	ccggatcggg	atttgccaca	accagattgt	120
tcaacactcg	gaaggctcac	caaatcgtcc	tacgcttctg	cttcctcctc	cacgaggtga	180
		atggcgttgc				240
		gccgccgccg				300
		ccggcgatgt				360
ttgatgacct	gatgaactgg	gcgcgtaagg	gctcgatttg	gcccatgacc	tttgggctcg	420

cctgctgcrc ggtcgagatg atgcacgccg gcgCgtcccg ctacgacttc gaccggGttc 480 540 ggcgtcatct tccgtccctc gccgcgcmag tccgattgca tgatcgtcgc cggcacgytc 600 accaacaaaa tggctccagc cctccgcaag gtttatgacc aaatgcctga gcctagatgg qttatttcaa tgggcagctg tgccaacggt ggtggatact accattactc ctactctgtt 660 qtacqtqqat qtqaccqtat agtccccqtg gacatctacg tccctgggtg cccaccaact gctgaggcac tgctgtacgg tgttcttcag ctccaaaaga agatcaacag gcgtaaggat ttccttcact ggtggaccaa gtgaagcatg cttctgctgt tgctcgcttg ctacgtttct ttgcactcga cctacctgtc ttatctgaaa taaggacgga ctttgctcgg attcacaaat 900 960 ttqttqtqcc tqqaaqqatq tatqcccagg ttgtgacgaa catataactt gtgtacttgg agtcagttcg cctgtaatgg acaccagacc tgctgtgaat ctgtttttaa gcttccattg 1020 taatacagca atac

- (2) INFORMATION FOR SEQ ID NO:3389:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 120 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..120
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576672
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3389:

Cys Leu Leu Phe Leu Cys Val Phe Gly Cys Trp Lys Gly Ser Gly Leu $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Leu Gln Leu Leu Met Ser Leu Leu Leu Gly Gly Phe Gly Val Arg Ile 20 25 30

Gly Ile Cys His Asn Gln Ile Val Gln His Ser Glu Gly Ser Pro Asn 35 40 45

Arg Pro Thr Leu Leu Pro Pro Pro Arg Gly Glu Thr Leu Ala 50 55 60

Thr Asp His Gly Val Ala Pro Ala His Arg Thr Val Gly Leu Pro Leu 65 70 75 80

Tyr Pro Ala Val Val Leu Arg Arg Arg Cys Gly Arg Leu Pro Asp 85 90 95

Leu Pro Ser Ala Ile Arg Gly Arg Ala Pro Thr Gly Asp Val Glu Glu 100 105 110

Xaa Arg Val Arg Gly Leu Gln Gly 115 120

- (2) INFORMATION FOR SEQ ID NO:3390:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..100
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576673
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3390:

Met Ser Leu Leu Gly Gly Phe Gly Val Arg Ile Gly Ile Cys His 1 5 10 15

Asn Gln Ile Val Gln His Ser Glu Gly Ser Pro Asn Arg Pro Thr Leu 20 25 30

Leu Leu Pro Pro Pro Arg Gly Glu Glu Thr Leu Ala Thr Asp His Gly

Val Ala Pro Ala His Arg Thr Val Gly Leu Pro Leu Tyr Pro Ala Val 50 55 60

Val Leu Arg Arg Arg Cys Gly Arg Leu Pro Asp Leu Pro Ser Ala
65 70 75 80

```
Ile Arg Gly Arg Ala Pro Thr Gly Asp Val Glu Glu Xaa Arg Val Arg
Gly Leu Gln Gly
```

100

- (2) INFORMATION FOR SEQ ID NO:3391:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..125
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576674
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3391: Met Ala Leu Leu Pro Arg Thr Ala Arg Leu Ala Phe Leu Ser Thr Pro

10 Arg Ser Tyr Ser Ala Ala Ala Ala Gly Ala Ser Pro Thr Ser Pro 30 20 25

Ala Pro Tyr Gly Gly Ala Pro Pro Pro Ala Met Ser Lys Arg Xaa Glu 40

Phe Val Val Ser Lys Val Asp Asp Leu Met Asn Trp Ala Arg Lys Gly 55

Ser Ile Trp Pro Met Thr Phe Gly Leu Ala Cys Cys Xaa Val Glu Met 75 70 Met His Ala Gly Ala Ser Arg Tyr Asp Phe Asp Arg Val Arg Arg His

Leu Pro Ser Leu Ala Ala Xaa Val Arg Leu His Asp Arg Arg Arg His

105 100 Xaa His Gln Gln Asn Gly Ser Ser Pro Pro Gln Gly Leu

- 120 115 (2) INFORMATION FOR SEQ ID NO:3392:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 868 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..868
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576682
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3392:

adgectetee aaaattegaa eaccetegee tggaacette taegageeag eteegagegg 60 tiqccqtccc ataatctgag agacggtgcc gtgggtttgc rgcgcctggg tcgccagtaa 120 agtgcgggcc gagatggagt cetegtegte rggcggcggg ctggcgcggc ggcggagtag 180 cggcggctgg ggcagcttca gcggcgacac ggacccgttc gacatccccg cgaagggcgc 240 acccctcgag cggcttagga agtggcggca agcagccctt gtgctgaatg catcaaggcg 300 ctttaggtac acactcgatt ttggaagagc attggccttg gtttcaagac tcccagcgaa 360 Gcaattgaag ggacctacat tgacaagaaa tgtccattca ctggaaccgt ttctatcaga 420 ggcagaatta ttgctggaac atgccacagt gctaagatga acagaaccat cattgttcgc 480 aggaactatc tccactttgt taagaaatac cagaggtatg aaaagaggca ctccaacatt 540 ccagctcaca tctccccatg cttccgtgtg aaggaaggcg accatgtcat cattggccag 600 tgcaggcccc tatcaaaaac tgtgaggttc aatgtcgtca aagtcattcc agctggatct 660 gctgctgccg gcaagaaggc tttcaccgca gcctgagttt aagactatgt tccatgagta 720 gtttatatag tgatgtcttt ttttgttaaa aaaactgcct tctaggcttg tgcctttcga 780 ctatggtttg gagattgttc ccatcttaat gaagtccaat catctgaaca tgttactgtt 840 tattgtacct tgtcgtgcaa agttttcc

- (2) INFORMATION FOR SEQ ID NO:3393:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..108
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576683
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3393:

Met Glu Ser Ser Ser Xaa Gly Gly Gly Leu Ala Arg Arg Arg Ser Ser

1 10 15

Gly Gly Trp Gly Ser Phe Ser Gly Asp Thr Asp Pro Phe Asp Ile Pro $20 \\ 25 \\ 30 \\$

Ala Lys Gly Ala Pro Leu Glu Arg Leu Arg Lys Trp Arg Gln Ala Ala 35 40 45

Leu Val Leu Asn Ala Ser Arg Arg Phe Arg Tyr Thr Leu Asp Phe Gly 50 55 60

Arg Ala Leu Ala Leu Val Ser Arg Leu Pro Ala Lys Gln Leu Lys Gly 65 70 75 80

Pro Thr Leu Thr Arg Asn Val His Ser Leu Glu Pro Phe Leu Ser Glu 85 90 95

Ala Glu Leu Leu Glu His Ala Thr Val Leu Arg

- (2) INFORMATION FOR SEQ ID NO:3394:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 79 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..79
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576684
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3394:

Met Asn Arg Thr Ile Ile Val Arg Arg Asn Tyr Leu His Phe Val Lys
1 10 15

Lys Tyr Gln Arg Tyr Glu Lys Arg His Ser Asn Ile Pro Ala His Ile 20 25 30

Ser Pro Cys Phe Arg Val Lys Glu Gly Asp His Val Ile Ile Gly Gln 35 40 45

Cys Arg Pro Leu Ser Lys Thr Val Arg Phe Asn Val Val Lys Val Ile 50 55 60

Pro Ala Gly Ser Ala Ala Ala Gly Lys Lys Ala Phe Thr Ala Ala 65 70 75

- (2) INFORMATION FOR SEQ ID NO:3395:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 63 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..63
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576685
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3395:

Met Leu Pro Cys Glu Gly Arg Arg Pro Cys His His Trp Pro Val Gln 1 5 10 15

Ala Pro Ile Lys Asn Cys Glu Val Gln Cys Arg Gln Ser His Ser Ser

Trp Ile Cys Cys Cys Arg Gln Glu Gly Phe His Arg Ser Leu Ser Leu 35

Arg Leu Cys Ser Met Ser Ser Leu Tyr Ser Asp Val Phe Phe Cys 50 60

- (2) INFORMATION FOR SEQ ID NO:3396:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 921 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..921
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576713
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3396:

atcetetage tetetetet tetettetet cacacacaca cacagteaca gacaccecta tcacttagac tgtgctagta ggtagcggcc gcgtaatgga gcaggagctc agccttgagc 120 tcaccctcct ccacccctcg gcctcgccgc cggagccacc gggctacttc gtctgcatgt 180 actgcgaccg caagttette agetegeagg eteteggtgg ceaccagaac gegeacaagt 240 acgagegeas etggeeaage geegeaggga gatageegee geeetgegeg egeaegggge 300 ggccgccacc gcmacgggcg cyccggagga cgacgmcgyc gccgcgatgg gctctcgcga 360 420 tgtccccgcc aggccacaag gcacgggtac cggagtcgtc gtcgttgaag atgagagtgc 480 aaccaggatg atggGacaag cagaaggctc ctgctgctga tgacgasstc ccgcgaccgc 540 qtcqtcqaqc aacatgaaga ggtcqtcgga gtacggctac ggcgtcgagg agctggatct 600 ctccctcagg ctttgattgg ttcctcttcc tcctccacyn nnanatataa ttcgccccgt tngctnagat aattcgatct ttgtggtcag tgcaatcatc tgtttcgcgt gcgtggtatc 660 720 tcagtgctgg atccgtcact ttcttcctca tgtagttgtt gtgcagttat attcttccat ccgatgatgg aacctatcgg caagaactat tgtcggccca tcctgctatc caaagggcgt 780 ggtatttggt gtgctctttt cggttttctg ccttgagtct tctttgtgcg atctaaattc 840 gcagcttgtt ttttccaaaa cggcggaaac agttttgccg caatttcgtt tggacctttt 900 tcaagtgact ctaaattggg c

- (2) INFORMATION FOR SEQ ID NO:3397:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 59 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..59
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576714
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3397:

Met Glu Gln Glu Leu Ser Leu Glu Leu Thr Leu Leu His Pro Ser Ala 1 5 10 15

Ser Pro Pro Glu Pro Pro Gly Tyr Phe Val Cys Met Tyr Cys Asp Arg 20 25 30

Lys Phe Phe Ser Ser Gln Ala Leu Gly Gly His Gln Asn Ala His Lys 35 40 45

Tyr Glu Arg Xaa Trp Pro Ser Ala Ala Gly Arg

- (2) INFORMATION FOR SEQ ID NO:3398:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 37 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..37
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576715

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3398:

Met Gly Ser Arg Asp Val Pro Ala Arg Pro Gln Gly Thr Gly 1 5 10 15

Val Val Val Glu Asp Glu Ser Ala Thr Arg Met Met Gly Gln Ala 20 25 30

Glu Gly Ser Cys Cys 35

- (2) INFORMATION FOR SEQ ID NO:3399:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..50
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576716
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3399:

Met Thr Xaa Ser Arg Asp Arg Val Val Glu Gln His Glu Glu Val Val 1 5 10 15

Gly Val Arg Leu Arg Arg Gly Ala Gly Ser Leu Pro Gln Ala Leu 20 25 30

Ile Gly Ser Ser Ser Ser Ser Xaa Xaa Xaa Tyr Asn Ser Pro Arg Xaa 35 40 45

Xaa Arg

50

- (2) INFORMATION FOR SEQ ID NO:3400:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 831 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..831
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576730
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3400:

60 tcaaqcacct atataqtaqt acctcataat ggcaggcaaa aacctaatac cattggggct 120 cattatcctc atgaccatgg gattagccaa tgctgttagg gtggttagat actctagtgc 180 cqatqqtact ggcacaggac agggagaagg tggtggatat gtgaatggcg ggggatcagg 240 qtctqqqtct qqcaccqgat caggtgatag tggtccttat ggtgcacatg caagtrctag tmgaggtggt ggaggggtg gaactagcca gtacggtggg tctggatatg gttctgggtc 300 agggtcaggg tcaggatcta gtacatatag tcaaggaggg tattctggtt atggagaatc 360 ttctagtgct ggtRggcatc ggtgggggtg gaggtggagg acaagctgca ggcgcatgga 420 attccaatqc tcaaqqatcc ggtagtggaa ctggttctgg ctctagctat gctaacaggt 480 540 attgqtacqq atcaaqtqaa gcaggtgcaa gtgctaatgg caatggtggt ggcacaggaa atagtcaaaa cggtggaagt ggtggtggct caggtgctgg atctgggttt ggcaatgcct 600 acccctaatt totatatota agtcaaccta tagttggago ccaacagtat ttgtcatttc 660 aagttgtggt attagttagt ttgtttgtac ctctattaca cttttgctag aactaaataa 720 ataaaqqqcc caactattct aqtaatggca gcagtttagt gtgaggttca gcttgtaaga 780 atttgttgta aacatgtcag tctatgaatg aaataataac ttccctttag c

- (2) INFORMATION FOR SEQ ID NO:3401:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 138 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..138
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576731
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3401:
- Met Gly Leu Ala Asn Ala Val Arg Val Val Arg Tyr Ser Ser Ala Asp
- Gly Thr Gly Thr Gly Gln Gly Glu Gly Gly Gly Tyr Val Asn Gly Gly 35 40 45
- Gly Ser Gly Ser Gly Thr Gly Ser Gly Asp Ser Gly Pro Tyr
- Gly Ala His Ala Ser Xaa Ser Xaa Gly Gly Gly Gly Gly Gly Thr Ser 70 75 80
- Gln Tyr Gly Gly Ser Gly Tyr Gly Ser Gly Ser Gly Ser Gly 85 90 95
- Ser Ser Thr Tyr Ser Gln Gly Gly Tyr Ser Gly Tyr Gly Glu Ser Ser 100 105 110
- Ser Ala Gly Xaa His Arg Trp Gly Trp Arg Trp Arg Thr Ser Cys Arg 115 120 125
- Arg Met Glu Phe Gln Cys Ser Arg Ile Arg 130 135
- (2) INFORMATION FOR SEQ ID NO:3402:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 147 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..147
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576732
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3402:
- Met Ala Gly Asp Gln Gly Leu Gly Leu Ala Pro Asp Gln Val Ile Val 1 5 10 15
- Val Leu Met Val His Met Gl
n Xaa Leu Xaa Glu Val Val Glu Gly Val 20 25 30
- Glu Leu Ala Ser Thr Val Gly Leu Asp Met Val Leu Gly Gln Gly Gln
 35 40 45
- Gly Gln Asp Leu Val His Ile Val Lys Glu Gly Ile Leu Val Met Glu 50 55 60
- Asn Leu Leu Val Leu Xaa Gly Ile Gly Gly Gly Gly Gly Gly Gln 65 70 75 80
- Ala Ala Gly Ala Trp Asn Ser Asn Ala Gln Gly Ser Gly Ser Gly Thr 85 90 95
- Gly Ser Gly Ser Ser Tyr Ala Asn Arg Tyr Trp Tyr Gly Ser Ser Glu 100 105 110
- Ala Gly Ala Ser Ala Asn Gly Asn Gly Gly Gly Thr Gly Asn Ser Gln
 115 120 125
- Asn Gly Gly Ser Gly Gly Ser Gly Ala Gly Ser Gly Phe Gly Asn 130 135 140
- Ala Tyr Pro
- 145
- (2) INFORMATION FOR SEQ ID NO:3403:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 129 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..129
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576733
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3403:

Ala Ser Thr Val Gly Leu Asp Met Val Leu Gly Gln Gly Gln Gly Gln 20 25 30

Asp Leu Val His Ile Val Lys Glu Gly Ile Leu Val Met Glu Asn Leu

Leu Val Leu Xaa Gly Ile Gly Gly Gly Gly Gly Gly Gln Ala Ala 50 55 60

Gly Ala Trp Asn Ser Asn Ala Gln Gly Ser Gly Ser Gly Thr Gly Ser 65 70 75 80

Gly Ser Ser Tyr Ala Asn Arg Tyr Trp Tyr Gly Ser Ser Glu Ala Gly

Ala Ser Ala Asn Gly Asn Gly Gly Gly Thr Gly Asn Ser Gln Asn Gly
100 105 110

Gly Ser Gly Gly Gly Ser Gly Ala Gly Ser Gly Phe Gly Asn Ala Tyr
115 120 125

Pro

- (2) INFORMATION FOR SEQ ID NO:3404:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 744 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..744
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576754
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3404:

ctcacgetca eggeegeege etccaceegt egeegettee teeegttaga etaggttagg 60 ctaggctagg gtgtcgacca gctcgcggta atggtggcct tcaggttcca tcagtaccag 120 gwggtggggc gcgcgctgcc gacgcccggc gacgagcacc ccaagatcta ccgcatgaag 180 ctctgggcca ccaacgaagt ccgcgccaag agcaagttct ggtacttcct gaggaagttg 240 aagaaggtta agaagagcaa cggtcaggtc ctggccatca acgagatctt cgagcgtaac 300 ccgacgacga tcaagaacta tggcatctgg Ctgcgctacc agagcagaac cggctaccac 360 aacatgtaca aggagtaccg cgacacaacc ctgaacggcg ctgtagagca gatgtacaat 420 gagatggctt ctcgccaccg cgtgaggtcc ccctgcatcc agatcatcaa gaccgccaca 480 gtacacttca agctgtgcaa gagggacaac accaagcagt ttcacaacag tgagatcaag 540 ttcccactcg tgtaccgcaa ggtcaggccg ccgaccagga agctgaagac cacgttcaag 600 gcttcgaggc ccaacctgtt catgtgattt agctgtggtc agtgtatgtg atcgtaagaa 660 tctgtgtttt aagttttgac gctaagactt gggtggtttg aagattcaac tcgttttgaa 720 acgtgcatgg tgaaccattt gccg

- (2) INFORMATION FOR SEQ ID NO:3405:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 178 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..178

(D) OTHER INFORMATION: / Ceres Seq. ID 1576755 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3405: Met Val Ala Phe Arg Phe His Gln Tyr Gln Xaa Val Gly Arg Ala Leu 1.0 Pro Thr Pro Gly Asp Glu His Pro Lys Ile Tyr Arg Met Lys Leu Trp 25 20 Ala Thr Asn Glu Val Arg Ala Lys Ser Lys Phe Trp Tyr Phe Leu Arg 45 40 Lys Leu Lys Lys Val Lys Lys Ser Asn Gly Gln Val Leu Ala Ile Asn 55 Glu Ile Phe Glu Arg Asn Pro Thr Thr Ile Lys Asn Tyr Gly Ile Trp 70 75 Leu Arg Tyr Gln Ser Arg Thr Gly Tyr His Asn Met Tyr Lys Glu Tyr 90 85 Arg Asp Thr Thr Leu Asn Gly Ala Val Glu Gln Met Tyr Asn Glu Met 100 105 Ala Ser Arg His Arg Val Arg Ser Pro Cys Ile Gln Ile Ile Lys Thr 120 115 Ala Thr Val His Phe Lys Leu Cys Lys Arg Asp Asn Thr Lys Gln Phe 135 140 His Asn Ser Glu Ile Lys Phe Pro Leu Val Tyr Arg Lys Val Arg Pro 145 150 155 Pro Thr Arg Lys Leu Lys Thr Thr Phe Lys Ala Ser Arg Pro Asn Leu 165 170 Phe Met

- (2) INFORMATION FOR SEQ ID NO:3406:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 150 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..150
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576756
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3406:
- Met Lys Leu Trp Ala Thr Asn Glu Val Arg Ala Lys Ser Lys Phe Trp 1 5 10 15
- Tyr Phe Leu Arg Lys Leu Lys Lys Val Lys Lys Ser Asn Gly Gln Val 20 25 30
- Leu Ala Ile Asn Glu Ile Phe Glu Arg Asn Pro Thr Thr Ile Lys Asn 35 40 45
- Tyr Gly Ile Trp Leu Arg Tyr Gln Ser Arg Thr Gly Tyr His Asn Met 50 55 60

 Tyr Lys Glu Tyr Arg Asp Thr Thr Leu Asn Gly Ala Val Glu Gln Met
- 65 70 75 80
 Tyr Asn Glu Met Ala Ser Arg His Arg Val Arg Ser Pro Cys Ile Gln
- 85 90 95

 Ile Ile Lys Thr Ala Thr Val His Phe Lys Leu Cys Lys Arg Asp Asn
 100 105 110
- Thr Lys Gln Phe His Asn Ser Glu Ile Lys Phe Pro Leu Val Tyr Arg 115 120 125
- Lys Val Arg Pro Pro Thr Arg Lys Leu Lys Thr Thr Phe Lys Ala Ser 130 135 140
- Arg Pro Asn Leu Phe Met
- 145 150
- (2) INFORMATION FOR SEQ ID NO:3407:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 654 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..654
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576757
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3407:

ggacctttct atcgcgcgca ttttctttcc gaccagccga vcgccgccgc cctccggcag gtcttcttcc cggccacgac cacccacgcc aggtcttccc ggccccgaac gcgagcaccc agecetecte caggtettee eeggegaega gegegtagaa gaggggatee ttagcacaat ggaagaagga gcaccagggc cgtcgcaagc catcccggat tctggagaca cgtaccgcaa 240 cagctccacc gcgcccgtgg gcagcagctc accgtctgtc gcgaagCtcc ggaagctgct gttccggcgg atgctcatcg gcgtcaacga cggccgctac ttccacggcc tgttccactg 360 categacaag cagggcaaca teatecteca ggacgeegta gagtaeegea gegeeegeea 420 ctgctcgcct ccgacggagc agcggtgcct ggggctcatc ctgatcccgg ccgcctgccg 480 gtcgtcgtgc caggtcgatt gctccgttga agagaagatg tcgctcctgt gttttgagtg 540 600 aatcqtqctt caaaqqqaat acactacqca tgtactaagt tactggggct catctctgct atctgaaact gagaggcatg attggtgttt cctatttttg aaggattgtt tatt

- (2) INFORMATION FOR SEQ ID NO:3408:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 179 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..179
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576758
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3408:

Asp Leu Ser Ile Ala Arg Ile Phe Phe Pro Thr Ser Arg Xaa Pro Pro 1 5 10 15

Pro Ser Gly Arg Ser Ser Ser Arg Pro Arg Pro Pro Thr Pro Gly Leu 20 25 30

Pro Gly Pro Glu Arg Glu His Pro Ala Leu Leu Gln Val Phe Pro Gly 35 40 45

Asp Glu Arg Val Glu Glu Gly Ile Leu Ser Thr Met Glu Glu Gly Ala 50 55 60

Pro Gly Pro Ser Gln Ala Ile Pro Asp Ser Gly Asp Thr Tyr Arg Asn 65 70 75 80

Ser Ser Thr Ala Pro Val Gly Ser Ser Ser Pro Ser Val Ala Lys Leu 85 90 95

Arg Lys Leu Leu Phe Arg Arg Met Leu Ile Gly Val Asn Asp Gly Arg 100 105 110

Tyr Phe His Gly Leu Phe His Cys Ile Asp Lys Gln Gly Asn Ile Ile 115 120 125

Leu Gln Asp Ala Val Glu Tyr Arg Ser Ala Arg His Cys Ser Pro Pro 130 135 140

Thr Glu Gln Arg Cys Leu Gly Leu Ile Leu Ile Pro Ala Ala Cys Arg 145 150 155 160

Ser Ser Cys Gln Val Asp Cys Ser Val Glu Glu Lys Met Ser Leu Leu 165 170 175

Cys Phe Glu

- (2) INFORMATION FOR SEQ ID NO:3409:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 120 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

(D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..120 (D) OTHER INFORMATION: / Ceres Seq. ID 1576759 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3409: Met Glu Glu Gly Ala Pro Gly Pro Ser Gln Ala Ile Pro Asp Ser Gly 5 10 Asp Thr Tyr Arg Asn Ser Ser Thr Ala Pro Val Gly Ser Ser Ser Pro 25 20 Ser Val Ala Lys Leu Arg Lys Leu Leu Phe Arg Arg Met Leu Ile Gly 40 45 Val Asn Asp Gly Arg Tyr Phe His Gly Leu Phe His Cys Ile Asp Lys 55 60 Gln Gly Asn Ile Ile Leu Gln Asp Ala Val Glu Tyr Arg Ser Ala Arg 75 70 His Cys Ser Pro Pro Thr Glu Gln Arg Cys Leu Gly Leu Ile Leu Ile 85 90 Pro Ala Ala Cys Arg Ser Ser Cys Gln Val Asp Cys Ser Val Glu Glu 110 105 100 Lys Met Ser Leu Leu Cys Phe Glu (2) INFORMATION FOR SEQ ID NO:3410: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 555 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..555 (D) OTHER INFORMATION: / Ceres Seq. ID 1576763 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3410: 60 qactccacqc cqccaqtcac qaccacqccq cqcctccqcc tggaaccctt tagccgagcg 120 gasaagggaa gaaatgggga agggtacggg cagcttcggc aagcgccgga acaagacgca cacgetetge atecgetgeg geggeeggeg tggageggge gegteaagaa eeeggateta 180 aatcqqqcqc ccaqcccqa qaqctccqac gccgagtgac atgagaagcg agcgagcagc 240 300 agcagcagca gccaccgcaa aggctcaacg acgacgacgt ccgttgttgc gacggcgccc agcqcaqCat gccgctgtcg tcttcgttcg tatccacgta cgtacgacgg cccagctgac 360 420 ccgcttgcct acccqtccqt tctqtqcqac tqqatqqtcq gtcggcgggc gtcgcggcga qqqctttcqq tacgtcgtgg ataagcacga ggggagggcg ggcaggcggg aacggaggcg 480 gaggcggcgg ccccaagtgg cggtctttcc aaatgtcaaa aaggacagct gtaacagtga taagaaaaac aagtc (2) INFORMATION FOR SEQ ID NO:3411: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 72 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..72 (D) OTHER INFORMATION: / Ceres Seq. ID 1576764 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3411:

Asp Ser Thr Pro Pro Val Thr Thr Pro Arg Leu Arg Leu Glu Pro

Phe Ser Arg Ala Xaa Lys Gly Arg Asn Gly Glu Gly Tyr Gly Gln Leu 25

10

30

Arg Gln Ala Pro Glu Gln Asp Ala His Ala Leu His Pro Leu Arg Arg 35 40 45

Pro Ala Trp Ser Gly Arg Val Lys Asn Pro Asp Leu Asn Arg Ala Pro 50 55 60

Ser Pro Glu Ser Ser Asp Ala Glu 65 70

- (2) INFORMATION FOR SEQ ID NO:3412:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 59 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..59
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576765
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3412:

Thr Pro Arg Arg Gln Ser Arg Pro Arg Arg Ala Ser Ala Trp Asn Pro 1 5 10 15

Leu Ala Glu Arg Xaa Arg Glu Glu Met Gly Lys Gly Thr Gly Ser Phe 20 25 30

Gly Lys Arg Arg Asn Lys Thr His Thr Leu Cys Ile Arg Cys Gly Gly 35 40 45

Arg Arg Gly Ala Gly Ala Ser Arg Thr Arg Ile 50 55

- (2) INFORMATION FOR SEQ ID NO:3413:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 111 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..111
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576766
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3413:

Met Arg Ser Glu Arg Ala Ala Ala Ala Ala Ala Thr Ala Lys Ala Gln
1 5 10 15

Arg Arg Arg Pro Leu Leu Arg Arg Pro Ala Gln His Ala Ala 20 25 30

Val Val Phe Val Arg Ile His Val Arg Thr Thr Ala Gln Leu Thr Arg 35 40 45

Leu Pro Thr Arg Pro Phe Cys Ala Thr Gly Trp Ser Val Gly Gly Arg 50 55 60

Arg Gly Glu Gly Phe Arg Tyr Val Val Asp Lys His Glu Gly Arg Ala 65 70 75 80

Gly Arg Arg Glu Arg Arg Arg Arg Arg Pro Gln Val Ala Val Phe 85 90 95

Pro Asn Val Lys Lys Asp Ser Cys Asn Ser Asp Lys Lys Asn Lys $100 \hspace{1.5cm} 105 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$

- (2) INFORMATION FOR SEQ ID NO:3414:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 925 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -

780

840

900

- (B) LOCATION: 1..925
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576795
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3414: gecagtteae etecgeetee getecteece tecceeteec gteetgeeat ggecaeegea geacgegece tegtegeege acgeeeggea eggeegetge tgeegteteg gegeeteeeg 120 tectectett ecateegtee egegeggeaa egtgetggeg tegggtgegt eegetgeatg gctcggcggc cggattccac ctattccccg ctgcgttcgg gccagggcgg tgaccgtgca 240 300 ccqactqaaa tggcgcctct gttccctggc tgcgactacg agcactggct catcgtcatg qacaaqcccq qqqqcqaqqq cqccaccaag cagcaaatga tagattgtta catccagacc 360 cttgcccagg tggtagggag tgaagaggag gcgaagaaga ggatatataa tgtgtcctgc 420 gagcgctatt ttggattcgg atgcgaaatt gacgaggaga cctCccaaca aactcgaagg 480 540 ccttccaggg gttctttttg tgcttcctga ctcttacgtt gatgctgaga acaaggatta 600 tqqtqctqaq ttatttqtqa acggtqaaat cgttcagcga tctccagaaa ggcagagaag ggtggagcca gtgcctcaga gagctcagga tcgaccacgg tacagtgacc ggacccgcta 660 tgtgaagcgg agggagaacc aatcttacca gagatgatgt ttccgtctct gaagatgtaa 720
- tataattttt gaaaccgttt tagcc (2) INFORMATION FOR SEQ ID NO:3415:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 169 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..169
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576796

aatgtcacgg tttccacaag tgtccaaatg cggtactgaa gatgcagcag caactcccca

ctactcatat gagaatggca tccgttctgt ttgccgcgca ttttaagctg tatatgctta

ttatgcattt gggcttgtac ctcagtcgat atgaacgatg tatcctttga actaacgcat

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3415:
- Ala Ser Ser Pro Pro Pro Pro Leu Leu Pro Ser Pro Ser Arg Pro Ala 1 10 15 15 15 Met Ala Thr Ala Ala Arg Ala Leu Val Ala Ala Arg Pro Ala Arg Pro

Met Ala Thr Ala Ala Arg Ala Leu Val Ala Ala Arg Pro Ala Arg Pro 20 25 30

Leu Leu Pro Ser Arg Arg Leu Pro Ser Ser Ser Ser Ile Arg Pro Ala 35 40 45

Arg Gln Arg Ala Gly Val Gly Cys Val Arg Cys Met Ala Arg Arg Pro 50 55 60
Asp Ser Thr Tyr Ser Pro Leu Arg Ser Gly Gln Gly Gly Asp Arg Ala

65 70 75 80
Pro Thr Glu Met Ala Pro Leu Phe Pro Gly Cys Asp Tyr Glu His Trp

Pro Thr Glu Met Ala Pro Leu Phe Pro Gly Cys Asp Tyr Glu His Trp
85 90 95

Leu Ile Val Met Asp Lys Pro Gly Gly Glu Gly Ala Thr Lys Gln Gln 100 105 110 Met Ile Asp Cys Tyr Ile Gln Thr Leu Ala Gln Val Val Gly Ser Glu

115 120 125 Glu Glu Ala Lys Lys Arg Ile Tyr Asn Val Ser Cys Glu Arg Tyr Phe

130 135 140
Gly Phe Gly Cys Glu Ile Asp Glu Glu Thr Ser Gln Gln Thr Arg Arg
145 150 155 160

145 150 Pro Ser Arg Gly Ser Phe Cys Ala Ser

- 165
 (2) INFORMATION FOR SEQ ID NO:3416:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 112 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..112
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576797
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3416:

Pro Val His Leu Arg Leu Arg Ser Ser Pro Pro Pro Val Leu Pro 1 5 10 15

Trp Pro Pro Gln His Ala Pro Ser Ser Pro His Ala Arg His Gly Arg
20 25 30

Cys Cys Arg Leu Gly Ala Ser Arg Pro Pro Leu Pro Ser Val Pro Arg 35 40 45

Gly Asn Val Leu Ala Ser Gly Ala Ser Ala Ala Trp Leu Gly Gly Arg
50 55 60

Ile Pro Pro Ile Pro Arg Cys Val Arg Ala Arg Ala Val Thr Val His 65 70 75 80

Arg Leu Lys Trp Arg Leu Cys Ser Leu Ala Ala Thr Thr Ser Thr Gly 85 90 95

Ser Ser Ser Trp Thr Ser Pro Gly Ala Arg Ala Pro Pro Ser Ser Lys

- (2) INFORMATION FOR SEQ ID NO:3417:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 153 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..153
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576798
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3417:

Met Ala Thr Ala Ala Arg Ala Leu Val Ala Ala Arg Pro Ala Arg Pro 1 5 10 15

Leu Leu Pro Ser Arg Arg Leu Pro Ser Ser Ser Ser Ile Arg Pro Ala 20 25 30

Arg Gln Arg Ala Gly Val Gly Cys Val Arg Cys Met Ala Arg Arg Pro 35 40 45

Asp Ser Thr Tyr Ser Pro Leu Arg Ser Gly Gln Gly Gly Asp Arg Ala
50 55 60

Pro Thr Glu Met Ala Pro Leu Phe Pro Gly Cys Asp Tyr Glu His Trp 65 70 75 80

Leu Ile Val Met Asp Lys Pro Gly Gly Glu Gly Ala Thr Lys Gln Gln 85 90 95

Met Ile Asp Cys Tyr Ile Gln Thr Leu Ala Gln Val Val Gly Ser Glu 100 105 110

Glu Glu Ala Lys Lys Arg Ile Tyr Asn Val Ser Cys Glu Arg Tyr Phe 115 120 125

Gly Phe Gly Cys Glu Ile Asp Glu Glu Thr Ser Gln Gln Thr Arg Arg 130 135 140

Pro Ser Arg Gly Ser Phe Cys Ala Ser

145 150

- (2) INFORMATION FOR SEQ ID NO:3418:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 545 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -

- (B) LOCATION: 1..545
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576799
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3418:

(~~~~/ ~~~	- <u>x</u>					
aatcttccag	cccaaagttc	catcccattg	ctcgctctgt	ccctccgttc	acaacctcct	60
ccacgaccga	acgagcagag	cagacccttc	cccctcacca	gctccgggtt	ccagcggcgg	120
cggcggcgaa	gatgatcata	ccggtgcgct	gcttcaCctg	cggcaaggtg	attgggaaca	180
agtgggacct	ctacctcgac	ctcctccagg	ccgactactc	ggaaggggat	gctctggatg	240
		tgctgcaggc				300
agaagttgct	caactacaac	acactggaga	agactgagac	aagttaagtg	agcaagcata	360
tcatgctctg	aaagcactac	tgtttcgcag	tatcatatat	attgtaggcg	gtatgttgtt	420
tcttctctat	caggagagga	ttgttgtGga	gtgtgaactt	gcttttgctc	tcgagcattc	480
aaggactgac	aagggcatgt	tgcatctatg	ttacgatgtt	ggagatttta	atcgatataa	540
cggct						

- (2) INFORMATION FOR SEQ ID NO:3419:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 96 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..96
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576800
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3419:
- Ile Phe Gln Pro Lys Val Pro Ser His Cys Ser Leu Cys Pro Ser Val 1 5 10 15
- His Asn Leu Leu His Asp Arg Thr Ser Arg Ala Asp Pro Ser Pro Ser 20 25 30
- Pro Ala Pro Gly Ser Ser Gly Gly Gly Gly Glu Asp Asp His Thr Gly 35 40 45
- Ala Leu Leu His Leu Arg Gln Gly Asp Trp Glu Gln Val Gly Pro Leu 50 55 60
- Pro Arg Pro Pro Pro Gly Arg Leu Leu Gly Arg Gly Cys Ser Gly Cys 65 70 75 80
- Phe Gly Ile Val Pro Leu Leu Leu Gln Ala Asn Ala His Asp Pro Cys 85 90 95
- (2) INFORMATION FOR SEQ ID NO:3420:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 114 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..114
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576801
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3420:
- Ser Ser Pro Lys Phe His Pro Ile Ala Arg Ser Val Pro Pro Phe 1 5 10 15
- Thr Thr Ser Ser Thr Thr Glu Arg Ala Glu Gln Thr Leu Pro Pro His 20 25 30
- Gln Leu Arg Val Pro Ala Ala Ala Ala Ala Lys Met Ile Ile Pro Val 35 40 45
- Arg Cys Phe Thr Cys Gly Lys Val Ile Gly Asn Lys Trp Asp Leu Tyr 50 55 60
- Leu Asp Leu Leu Gln Ala Asp Tyr Ser Glu Gly Asp Ala Leu Asp Ala 65 70 75 80

Leu Glu Leu Phe Arg Tyr Cys Cys Arg Arg Met Leu Met Thr His Val 90 Asp Leu Ile Glu Lys Leu Leu Asn Tyr Asn Thr Leu Glu Lys Thr Glu

105 110 100

Thr Ser

- (2) INFORMATION FOR SEQ ID NO:3421:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 71 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..71
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576802
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3421:

Met Ile Ile Pro Val Arg Cys Phe Thr Cys Gly Lys Val Ile Gly Asn 10 5

Lys Trp Asp Leu Tyr Leu Asp Leu Leu Gln Ala Asp Tyr Ser Glu Gly 20 25

Asp Ala Leu Asp Ala Leu Glu Leu Phe Arg Tyr Cys Cys Arg Arg Met 40 45

Leu Met Thr His Val Asp Leu Ile Glu Lys Leu Leu Asn Tyr Asn Thr 55

Leu Glu Lys Thr Glu Thr Ser

70

- (2) INFORMATION FOR SEQ ID NO:3422:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 748 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..748
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576803
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3422:

aacttaacca ctactccgca tctactgacg ccgccgccgc cgccgccgcg ctctctccgt 60 cggactagtc agagcatccg tcatggcgaa gaaccccaag gtgttcttcg acatcctcat 120 180 cqqcaaqtcc aagqccgggc gggtcgtgat ggagctcttc gccgacaagg tgcccaagac ggccgagaac ttccgctgcc tgtgcacggg cgagaagggc ctgggstccg cggggaagcc 240 gctgcactac aagggctcgg ccttccaccg cgtcatcccg ggcttcatgt gccagggcgg 300 360 cgacttcacc cggggcaacg gcacgggcgg cgagtccatc tacggcgcca ggttcgccga cgagaacttc aagCtgcgcc acacgggacc cggcgtgctc tccatggcca acgcggggcc 420 480 cgacaccaac ggctcccagt tcttcatctg caccgcgcag acgccctggc ttgacggcaa gcacgtcgtc ttcggcaagg tcgtcgawgk ctacgccgtc gtggacaaga tggaggctgt 540 cggttctcag tcaggtgcca cggccgagag cgtacgcatc gaggactgcg gccagcttgc 600 cgacgactga gggcctcgct gtgtccgatt gtaaccaaat gaatgatcaa taaatttctt 660 totttcattc ttttgtttct gtggagatgg ataccggcct gtagttaatt aaccaatata 720 aactatggat ggatggggcg gtgatttg

- (2) INFORMATION FOR SEQ ID NO:3423:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 157 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..157
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576804

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3423:

Asn Leu Thr Thr Thr Pro His Leu Leu Thr Pro Pro Pro Pro Pro Pro 1 5 10 15

Arg Ser Leu Arg Arg Thr Ser Gln Ser Ile Arg His Gly Glu Glu Pro 20 25 30

Gln Gly Val Leu Arg His Pro His Arg Gln Val Gln Gly Arg Ala Gly 35 40 45

Arg Asp Gly Ala Leu Arg Arg Gln Gly Ala Gln Asp Gly Arg Glu Leu 50 55 60

Pro Leu Pro Val His Gly Arg Glu Gly Pro Gly Xaa Arg Gly Glu Ala 65 70 75 80

Ala Ala Leu Gln Gly Leu Gly Leu Pro Pro Arg His Pro Gly Leu His 85 90 95

Val Pro Gly Arg Arg Leu His Pro Gly Gln Arg His Gly Arg Arg Val 100 105 110

His Leu Arg Arg Gln Val Arg Arg Glu Leu Gln Ala Ala Pro His 115 120 125

Gly Thr Arg Arg Ala Leu His Gly Gln Arg Gly Ala Arg His Gln Arg 130 135 140

- (2) INFORMATION FOR SEQ ID NO:3424:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..175
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576805
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3424:

Met Ala Lys Asn Pro Lys Val Phe Phe Asp Ile Leu Ile Gly Lys Ser 1 10 15

Lys Ala Gly Arg Val Val Met Glu Leu Phe Ala Asp Lys Val Pro Lys 20 25 30

Thr Ala Glu Asn Phe Arg Cys Leu Cys Thr Gly Glu Lys Gly Leu Xaa 35 40 45

Ile Pro Gly Phe Met Cys Gln Gly Gly Asp Phe Thr Arg Gly Asn Gly 65 70 75 80

Thr Gly Gly Glu Ser Ile Tyr Gly Ala Arg Phe Ala Asp Glu Asn Phe 85 90 95

Lys Leu Arg His Thr Gly Pro Gly Val Leu Ser Met Ala Asn Ala Gly
100 105 110

Pro Asp Thr Asn Gly Ser Gln Phe Phe Ile Cys Thr Ala Gln Thr Pro 115 120 125

Trp Leu Asp Gly Lys His Val Val Phe Gly Lys Val Val Xaa Xaa Tyr 130 135 140

Ala Val Val Asp Lys Met Glu Ala Val Gly Ser Gln Ser Gly Ala Thr 145 150 155 160

Ala Glu Ser Val Arg Ile Glu Asp Cys Gly Gln Leu Ala Asp Asp 165 170 175

- (2) INFORMATION FOR SEQ ID NO:3425:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 153 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..153
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576806
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3425:
- Met Glu Leu Phe Ala Asp Lys Val Pro Lys Thr Ala Glu Asn Phe Arg
 1 10 15
- Cys Leu Cys Thr Gly Glu Lys Gly Leu Xaa Ser Ala Gly Lys Pro Leu 20 25 30
- His Tyr Lys Gly Ser Ala Phe His Arg Val Ile Pro Gly Phe Met Cys 35 40 45
- Gln Gly Gly Asp Phe Thr Arg Gly Asn Gly Thr Gly Gly Glu Ser Ile 50 55 60
- Tyr Gly Ala Arg Phe Ala Asp Glu Asn Phe Lys Leu Arg His Thr Gly 65 70 75 80
- Pro Gly Val Leu Ser Met Ala Asn Ala Gly Pro Asp Thr Asn Gly Ser 85 90 95
- Gln Phe Phe Ile Cys Thr Ala Gln Thr Pro Trp Leu Asp Gly Lys His 100 105 110
- Val Val Phe Gly Lys Val Val Xaa Xaa Tyr Ala Val Val Asp Lys Met 115 120 125
- Glu Ala Val Gly Ser Gln Ser Gly Ala Thr Ala Glu Ser Val Arg Ile 130 135 140
- Glu Asp Cys Gly Gln Leu Ala Asp Asp 145
- (2) INFORMATION FOR SEQ ID NO:3426:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 642 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..642
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576807
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3426:
- caattcatcc agacaagtca tatctagcta tagctctccc ttgagaagca tttgarggag 120 qaqccatqtc tqaqqaqaaq caccaccacc acctgtttca ccaccgcaag ccagaggagg agggcgcctc cggcgaggtc gactacgaga agaaggagaa gcaccacaag cacatggaga 180 240 ageteggega geteggegee ategeegeeg gegegtaege eetgeaegag aageaeaagg ccaagaagga cccagagaac gagcacgggc accgggtcaa ggaggaggtg gccgccgtcg 300 ccgccgtggg ctccgccggc ttcgctttcc acgagcacca cgagaagaag gacgccaaga 360 ageacgecca caactgatec gtegeggttg ctgttecate tgttetteca geetegtett 420 cqtctactgt gtgccggcca ggccttgatt tgggctaccg atatttgcat ggacgtagga 480 actqtqttqg tcggtcctcg gcgttcTttg tatcaagatc aaatcaggcc ttgaataagt 540 gtgtgtgcat atatctttt ttttaatttt tatctctttt ttttttgtat cgagagatgt 600 cctgaataat gtgaatttac gtgtgtttat ataaacgaat tt
- (2) INFORMATION FOR SEQ ID NO:3427:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 103 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..103
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576808
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3427:

Met Ser Glu Glu Lys His His His Leu Phe His His Arg Lys Pro 1 5 10 15

Glu Glu Gly Gla Ser Gly Glu Val Asp Tyr Glu Lys Lys Glu Lys 20 25 30

His His Lys His Met Glu Lys Leu Gly Glu Leu Gly Ala Ile Ala Ala $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Gly Ala Tyr Ala Leu His Glu Lys His Lys Ala Lys Lys Asp Pro Glu 50 60

Asn Glu His Gly His Arg Val Lys Glu Glu Val Ala Ala Val Ala Ala 65 70 75 80

Val Gly Ser Ala Gly Phe Ala Phe His Glu His His Glu Lys Lys Asp 85 90 95

Ala Lys Lys His Ala His Asn 100

- (2) INFORMATION FOR SEQ ID NO:3428:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..67
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576809
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3428:

Met Glu Lys Leu Gly Glu Leu Gly Ala Ile Ala Ala Gly Ala Tyr Ala 1 5 10 15

Leu His Glu Lys His Lys Ala Lys Lys Asp Pro Glu Asn Glu His Gly 20 25 30

His Arg Val Lys Glu Glu Val Ala Ala Val Ala Ala Val Gly Ser Ala 35 40 45

Gly Phe Ala Phe His Glu His His Glu Lys Lys Asp Ala Lys Lys His 50 55 60

Ala His Asn

65

- (2) INFORMATION FOR SEQ ID NO:3429:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 722 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..722
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576816
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3429:

acacaagtca	tccgagaagc	aagcacaagc	accgcaccga	acgagcagcg	agcgtgttga	60
		gggagtagga				120
		cgcgtccgct				180
gagtgcGggg	cgacgccgcc	ggacaggatg	gcgctgaagc	tggcgccgtg	Cscgtccgcg	240
gcgcagaacc	ccagctcggc	gccgtccaac	ggctgctgca	cggcggtgca	caccatcggg	300
aagcagagcc	cccagtgcct	ctgcgccgtc	atgctgtcca	agaccgccaa	gaagtccggg	360
atcaagcccg	aggtggccat	caccatcccc	aagcgctgca	acctcgtcga	ccgccccgtc	420
ggctacaagt	gcggagatta	cactctgcca	tgastgcgcg	agagctgctt	gagcacatgt	480
gcatgatccg	tgtcggagtt	agcacgacgt	ccgcaggaag	tgacggtgac	gtgtcagtgt	540
atgtgtgcgt	tggtaataaa	cgtcgcggca	ctccgcactt	gttgtgatta	ccatacatgt	600

- (2) INFORMATION FOR SEQ ID NO:3430:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 194 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..194
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576817
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3430:

Ser Val Leu Arg Gln Ala Val Ser Gly Ser Gly Ser Arg Arg Gln Gly 20 25 30

Tyr Arg Asp Glu Gly Pro Leu Val Ala Arg Pro Arg Pro Gly Arg Val 35 40 45

Arg Cys Met Pro Arg Gly Arg Xaa Arg Arg Gly Arg Val Arg Gly Asp 50 55 60

Ala Ala Gly Gln Asp Gly Ala Glu Ala Gly Ala Val Xaa Val Arg Gly 65 70 75 80

Ala Glu Pro Gln Leu Gly Ala Val Gln Arg Leu Leu His Gly Gly Ala 85 90 95

His His Arg Glu Ala Glu Pro Pro Val Pro Leu Arg Arg His Ala Val 100 105 110

Gln Asp Arg Gln Glu Val Arg Asp Gln Ala Arg Gly Gly His His His 115 120 125

Pro Gln Ala Leu Gln Pro Arg Arg Pro Pro Arg Arg Leu Gln Val Arg 130 135 140

Arg Leu His Ser Ala Met Xaa Ala Arg Glu Leu Leu Glu His Met Cys 145 150 155 160 Met Ile Arg Val Gly Val Ser Thr Thr Ser Ala Gly Ser Asp Gly Asp

165 170 175
Val Ser Val Tyr Val Cys Val Gly Asn Lys Arg Arg Gly Thr Pro His

Val Ser Val Tyr Val Cys Val Gly Asn Lys Arg Arg Gly Thr Pro His 180 185 190

Leu Leu

- (2) INFORMATION FOR SEQ ID NO:3431:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..115
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576818
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3431:

Met Lys Gly Leu Leu Leu Val Leu Ala Leu Val Ala Ser Ala Ala 1 5 10 15

Cys Leu Val Ala Xaa Arg Gly Ala Gly Glu Cys Gly Ala Thr Pro Pro 20 25 30

Asp Arg Met Ala Leu Lys Leu Ala Pro Cys Xaa Ser Ala Ala Gln Asn 35 40 45

Pro Ser Ser Ala Pro Ser Asn Gly Cys Cys Thr Ala Val His Thr Ile
50 55 60

Gly Lys Gln Ser Pro Gln Cys Leu Cys Ala Val Met Leu Ser Lys Thr 65 70 75 80

Ala Lys Lys Ser Gly Ile Lys Pro Glu Val Ala Ile Thr Ile Pro Lys 85 90 95

Arg Cys Asn Leu Val Asp Arg Pro Val Gly Tyr Lys Cys Gly Asp Tyr 100 105 110

Thr Leu Pro

115

- (2) INFORMATION FOR SEQ ID NO:3432:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 144 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..144
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576819
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3432:

Met Pro Arg Gly Arg Xaa Arg Arg Gly Arg Val Arg Gly Asp Ala Ala

1 10 15

Gly Gln Asp Gly Ala Glu Ala Gly Ala Val Xaa Val Arg Gly Ala Glu
20 25 30

Pro Gln Leu Gly Ala Val Gln Arg Leu Leu His Gly Gly Ala His His 35 40 45

Arg Glu Ala Glu Pro Pro Val Pro Leu Arg Arg His Ala Val Gln Asp 50 55 60
Arg Gln Glu Val Arg Asp Gln Ala Arg Gly Gly His His His Pro Gln

65 70 75 80

Ala Leu Gln Pro Arg Arg Pro Pro Arg Arg Leu Gln Val Arg Arg Leu

85 90 95

His Ser Ala Met Xaa Ala Arg Glu Leu Leu Glu His Met Cys Met Ile

100 105 110
Arg Val Gly Val Ser Thr Thr Ser Ala Gly Ser Asp Gly Asp Val Ser

115 120 125 Val Tyr Val Cys Val Gly Asn Lys Arg Gly Thr Pro His Leu Leu

140

- (2) INFORMATION FOR SEQ ID NO:3433:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 702 base pairs

135

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:

130

- (A) NAME/KEY: -
- (B) LOCATION: 1..702
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576842
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3433:

ttcagttggc agttgcgact tgcgagtggc tccaacaagg caacacaatc caccggcacc 60 120 aacccagcgc ggcgccaccg gcgacccgta cccccttccc cggagagcga tggcgacgga gctgacggcg gcgcactgcg cgcgtacgac ggcaccgacc cgtccaagcc catctacgtc 180 240 tccgtccggg gcaaggtcta cgacgtcacc tccggccgCc ggcttctacg gccNccggcg 300 gcgcctacgc cgtcttcgcg ggccgcgagg Ccagccgcgc cctcggcaag atgtccaagg 360 acgaggeega egteteeggg gaceteteeg ggeteacega caaggagete ggegteeteg 420 ccgactggga gaccaagttc caGggccaag taccccgtcg tcgcccgact cgccgccgac geotgaacte ggeagteteg gtgtaaattt actetgteet geetettgeg gtgtteagtg 480 ttgtgcttgc ttgcttgttg ctagttgctt tgctaSccca ataatctgaa tGggaaggac 540 gtatgtgatg tgcctgctga atagctcgag ctcctagtcc ttgcatacac tgctgtgcta 600 ccacatgaca tgatgtactc gtgtgtgctt tggttgttgt gtaattccat gaccatgatc 660 agtaatctga ataaaaaata ttggagatgt gcttgcttcc tg

- (2) INFORMATION FOR SEQ ID NO:3434:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 141 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..141
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576843
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3434:

Phe Ser Trp Gln Leu Arg Leu Ala Ser Gly Ser Asn Lys Ala Thr Gln 1 5 10 15

Ser Thr Gly Thr Asn Pro Ala Arg Arg His Arg Arg Pro Val Pro Pro 20 25 30

Ser Pro Glu Ser Asp Gly Asp Gly Ala Asp Gly Gly Ala Leu Arg Ala 35 40 45

Tyr Asp Gly Thr Asp Pro Ser Lys Pro Ile Tyr Val Ser Val Arg Gly 50 60

Lys Val Tyr Asp Val Thr Ser Gly Arg Arg Leu Leu Arg Xaa Pro Ala 65 70 75 80

Ala Pro Thr Pro Ser Ser Arg Ala Ala Arg Pro Ala Ala Pro Ser Ala 85 90 95

Arg Cys Pro Arg Thr Arg Pro Thr Ser Pro Gly Thr Ser Pro Gly Ser

Pro Thr Arg Ser Ser Ala Ser Ser Pro Thr Gly Arg Pro Ser Ser Arg 115 120 125

Ala Lys Tyr Pro Val Val Ala Arg Leu Ala Ala Asp Ala 130 135 140

- (2) INFORMATION FOR SEQ ID NO:3435:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..175
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576844
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3435:

Ser Val Gly Ser Cys Asp Leu Arg Val Ala Pro Thr Arg Gln His Asn
1 5 10 15

Pro Pro Ala Pro Thr Gln Arg Gly Ala Thr Gly Asp Pro Tyr Pro Leu 20 25 30

Pro Arg Arg Ala Met Ala Thr Glu Leu Thr Ala Ala His Cys Ala Arg 35 40 45

Thr Thr Ala Pro Thr Arg Pro Ser Pro Ser Thr Ser Pro Ser Gly Ala 50

Arg Ser Thr Thr Ser Pro Pro Ala Ala Gly Phe Tyr Gly Xaa Arg Arg 65 70 75 80

Arg Leu Arg Arg Leu Arg Gly Pro Arg Gly Gln Pro Arg Pro Arg Gln
85 90 95

Asp Val Gln Gly Arg Gly Arg Leu Arg Gly Pro Leu Arg Ala His 100 105 110

Arg Gln Gly Ala Arg Arg Pro Arg Arg Leu Gly Asp Gln Val Pro Gly
115 120 125

```
Pro Ser Thr Pro Ser Ser Pro Asp Ser Pro Pro Thr Pro Glu Leu Gly
                       135
Ser Leu Gly Val Asn Leu Leu Cys Pro Ala Ser Cys Gly Val Gln Cys
                                      155
                150
Cys Ala Cys Leu Leu Val Ala Ser Cys Phe Ala Xaa Pro Ile Ile
                                  170
               165
(2) INFORMATION FOR SEQ ID NO:3436:
```

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 139 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..139
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576845
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3436:

Met Ala Thr Glu Leu Thr Ala Ala His Cys Ala Arg Thr Thr Ala Pro 10 5 Thr Arg Pro Ser Pro Ser Thr Ser Pro Ser Gly Ala Arg Ser Thr Thr

20 25

Ser Pro Pro Ala Ala Gly Phe Tyr Gly Xaa Arg Arg Arg Leu Arg Arg 40 45

Leu Arg Gly Pro Arg Gly Gln Pro Arg Pro Arg Gln Asp Val Gln Gly 60 55

Arg Gly Arg Arg Leu Arg Gly Pro Leu Arg Ala His Arg Gln Gly Ala 70 75

Arg Arg Pro Arg Arg Leu Gly Asp Gln Val Pro Gly Pro Ser Thr Pro 90 8.5

Ser Ser Pro Asp Ser Pro Pro Thr Pro Glu Leu Gly Ser Leu Gly Val 105 100 110

Asn Leu Cys Pro Ala Ser Cys Gly Val Gln Cys Cys Ala Cys Leu 115 120

Leu Val Ala Ser Cys Phe Ala Xaa Pro Ile Ile 135 130

- (2) INFORMATION FOR SEQ ID NO:3437:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 828 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..828
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576855
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3437:

acggttggtc	cacctcctcc	tgctcctctg	gcctctgcgg	tgcctcctcc	cggtcccgag	60
tcccggccat	gtcgtcgccg	ctggaggatg	tcagcgtggg	catggaggag	gaggatcagc	120
			gcgccaccac			180
			gcctcgacta			240
			aggcggacca			300
			tcaccgggat			360
			accaggccgt			420
			gccggctgca			480
			gcggccggcg			540
			aacatcttct			600
			ctcctgccct			660
			ggtgccastg			720
			cctccatcca			780

ggaaagcaac cagcaagtaa ataaacaatc ataattagac ttttctkg

- (2) INFORMATION FOR SEQ ID NO:3438:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 244 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..244
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576856
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3438:

Arg Leu Val His Leu Leu Leu Leu Trp Pro Leu Arg Cys Leu Leu 1 10 15

Pro Val Pro Ser Pro Gly His Val Val Ala Ala Gly Gly Cys Gln Arg 20 25 30

Gly His Gly Gly Gly Ser Ala Ala Pro Glu Pro Gly Pro Ala Pro 35 40 45

Pro Glu Arg His His Gln Arg Leu Pro Gly Gly His Gly Arg Leu Gln 50 60

Ser Leu Pro Tyr Arg Glu Pro Arg Leu Arg Asp Asp Arg Glu Arg Ala
70 75 80

Val Arg Pro Glu Leu Glu Asp Glu Ala Gln Gly Gly Pro Gly Ala Val 85 90 95

Arg Gly Ala Gln Val Asp Leu Leu Leu Arg His Arg His Pro His Arg 100 105 110

Asp Arg Arg Leu Leu His Gln Pro Arg Arg Arg Glu Arg Arg Gly Leu 115 120 125

Gln Ala Pro Gly Arg Phe Arg Pro Ser Trp Thr Pro Pro Ala Thr Gly
130 135 140

Arg Arg Ser Gly Cys Ser Pro Ala Ala Thr Trp Arg Ser Cys Cys Trp 145 150 155 160

Arg Arg Pro Ser Arg Arg Ser Cys Arg Arg Arg Pro Ala Gly Arg Glu 165 170 175 Ser Arg Arg Ser Arg Pro Thr Ser Thr Ala Ser Thr Arg Pro Thr Ser

180 185 190
Ser Arg Cys Gly Pro Ser Leu Ser Arg Cys Ala Val Cys Val Pro Phe
195 200 205

195 200 205
Pro Ser Ser Cys Pro Arg Xaa Xaa Phe Arg Leu Leu Gln Cys Thr Cys
210 215 220

Ser Pro His His Phe Leu Val Pro Xaa Arg Lys Trp Ile Thr Ile His 225 230 235 240

Thr Asn Ile Met

- (2) INFORMATION FOR SEQ ID NO:3439:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 242 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..242
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576857
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3439:

Gly Trp Ser Thr Ser Ser Cys Ser Ser Gly Leu Cys Gly Ala Ser Ser 1 5 10 15

Arg Ser Arg Val Pro Ala Met Ser Ser Pro Leu Glu Asp Val Ser Val 20 25 30

Glv Met Glu Glu Glu Asp Gln Arg Pro Leu Asn Arg Ala Leu Leu His 4.0 Arg Ser Ala Thr Thr Asn Ala Ser Gln Val Ala Met Val Gly Ser Asn 55 60 Pro Cys Pro Ile Glu Ser Leu Asp Tyr Glu Met Ile Glu Asn Glu Leu 75 70 Phe Asp Gln Asn Trp Arg Thr Arg Arg Lys Ala Asp Gln Val Arg Tyr 90 85 Val Val Leu Lys Trp Thr Phe Cys Phe Ala Ile Gly Ile Leu Thr Gly 100 105 110 Ile Val Gly Phe Phe Ile Asn Leu Ala Val Glu Asn Val Ala Gly Phe 115 120 Lys His Gln Ala Val Ser Ala Pro His Gly Leu Arg Gln Leu Leu Asp 135 140 Gly Val Leu Gly Val Arg Arg Leu Gln Pro Gly Ala Pro Ala Ala Gly 150 155 Val Val His His Gly Val Leu Val Ala Gly Gly Arg Arg Val Gly Asn 165 170 175 Pro Gly Gly Gln Gly Leu Pro Gln Arg Arg Arg Ala Gln His Leu 190 180 185 Leu Ala Ala Asp Pro Arg Cys Gln Gly Ala Pro Cys Val Phe Arg Ser 205 200 His Pro Pro Ala Leu Ala Xaa Ala Phe Ala Cys Cys Ser Ala His Ala 215 220 Pro Leu Thr Ile Ser Trp Cys Xaa Cys Ala Asn Gly Leu Pro Ser Thr 235 230 Leu Ile

- (2) INFORMATION FOR SEQ ID NO:3440:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 220 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..220
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576858
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3440:
- Met Ser Ser Pro Leu Glu Asp Val Ser Val Gly Met Glu Glu Asp 1 5 5 10 15 Gln Arg Pro Leu Asn Arg Ala Leu Leu His Arg Ser Ala Thr Thr Asn
- 20 25 30
 Ala Ser Gln Val Ala Met Val Gly Ser Asn Pro Cys Pro Ile Glu Ser
- 35 40 45
 Leu Asp Tyr Glu Met Ile Glu Asn Glu Leu Phe Asp Gln Asn Trp Arg
- 50 55 60
 Thr Arg Arg Lys Ala Asp Gln Val Arg Tyr Val Val Leu Lys Trp Thr
- 65 70 75 80
 Phe Cys Phe Ala Ile Gly Ile Leu Thr Gly Ile Val Gly Phe Phe Ile
- Asn Leu Ala Val Glu Asn Val Ala Gly Phe Lys His Gln Ala Val Ser
- Ala Pro His Gly Leu Arg Gln Leu Leu Asp Gly Val Leu Gly Val Arg
- Arg Leu Gln Pro Gly Ala Pro Ala Ala Gly Val Val His His Gly Val
 130 140
- Leu Val Ala Gly Gly Arg Arg Val Gly Asn Pro Gly Gly Gln Gly Leu 145 150 155 160
- Pro Gln Arg Arg Arg Ala Gln His Leu Leu Ala Ala Asp Pro Arg

Client Docket No. 80145.003 170 165 Cys Gln Gly Ala Pro Cys Val Phe Arg Ser His Pro Pro Ala Leu Ala 190 180 185 Xaa Ala Phe Ala Cys Cys Ser Ala His Ala Pro Leu Thr Ile Ser Trp 200 205 Cys Xaa Cys Ala Asn Gly Leu Pro Ser Thr Leu Ile 215 (2) INFORMATION FOR SEQ ID NO:3441: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 955 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..955 (D) OTHER INFORMATION: / Ceres Seq. ID 1576876 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3441: aagcgtcagg gcctctcgat cgctcatcag tcgccagagg agtagttgat cgaggtgagt 60 gaggttgaaa agcaggcggc gaacaaaggc accatcgtca tggacggcgg atactacggc 120 ggccgcgatc agcgctacad cngcgggtac tacggcggcg gtggcatcgc gacgccgggg 180 tacgctccgg cggtcccgta cgggatgtcg caggtgaaca tcgadggcha cgggtgcngg 240 edggeretge egeegeagee gacegtgaag gtgtactgee gegeeaacee caactaegee 300 atgarcgtcc gckacgggaa ggtrgtgctg gcgccggcga accccaagga cgagtaccag 360 cactggatca aggacatgcn gtggagcacg agcatcaagg acgakgaagg ttacccggcg 420 ttcgcrctgg tgaacaarge gaccggggag gccatcaagR cactcgctGg gggcagtccc 480 accoggtgcg cctggtgccc tacaaccogg actttttgga cgagtcggtg ctgtggacgg 540 agageegega egteggeaae ggetteeget gegteegeat ggteaacaae atetacetea 600 acttcgacgc cctccacggc gacaagtggc acggcggcgt ccgtgacggc accgacgtcg 660 tgctctggaa gtggtgcgag ggcgacaacc agcgctggaa gatccagccc tactactgaa 720 ccaacggatg atatgaccat cgcgcccatc gatcgtgcac atgcatgcat acgtactagc 780 agaataacag gggtcttatc tcccgaggcg tcttttgcat gcatgccagc agttgcatag ataaagcagg agcgagacaa agggtgttca tgtatattgc agctgtatca ctgtatgtat 900 gtgccattgt gccttgtaat aatacatata ataataaagt tgctcggagt gtatt (2) INFORMATION FOR SEQ ID NO:3442: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 246 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..246 (D) OTHER INFORMATION: / Ceres Seq. ID 1576877 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3442: Met Asp Gly Gly Tyr Tyr Gly Gly Arg Asp Gln Arg Tyr Xaa Xaa Gly 10 Tyr Tyr Gly Gly Gly Ile Ala Thr Pro Gly Tyr Ala Pro Ala Val 25 20 Pro Tyr Gly Met Ser Gln Val Asn Ile Xaa Gly Xaa Gly Cys Xaa Xaa 40 45 35 Xaa Leu Pro Pro Gln Pro Thr Val Lys Val Tyr Cys Arg Ala Asn Pro 60 55 Asn Tyr Ala Met Xaa Val Arg Xaa Gly Lys Xaa Val Leu Ala Pro Ala

75

110

90

Asn Pro Lys Asp Glu Tyr Gln His Trp Ile Lys Asp Met Xaa Trp Ser

Thr Ser Ile Lys Asp Xaa Glu Gly Tyr Pro Ala Phe Xaa Leu Val Asn

70

85

100

Xaa Ala Thr Gly Glu Ala Ile Lys Xaa Leu Ala Gly Gly Ser Pro Thr 125 120 115 Arg Cys Ala Trp Cys Pro Thr Thr Arg Thr Phe Trp Thr Ser Arg Cys 140 130 135 Cys Gly Arg Arg Ala Ala Thr Ser Ala Thr Ala Ser Ala Ala Ser Ala 150 155 Trp Ser Thr Thr Ser Thr Ser Thr Ser Thr Pro Ser Thr Ala Thr Ser 165 170 175 Gly Thr Ala Ala Ser Val Thr Ala Pro Thr Ser Cys Ser Gly Ser Gly 190 180 185 Ala Arg Ala Thr Thr Ser Ala Gly Arg Ser Ser Pro Thr Thr Glu Pro 195 200 205 Thr Asp Asp Met Thr Ile Ala Pro Ile Asp Arg Ala His Ala Cys Ile 210 215 220 Arg Thr Ser Arg Ile Thr Gly Val Leu Ser Pro Glu Ala Ser Phe Ala 230 235

Cys Met Pro Ala Val Ala

245

- (2) INFORMATION FOR SEQ ID NO:3443:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 211 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..211
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576878
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3443:
- Met Ser Gln Val Asn Ile Xaa Gly Xaa Gly Cys Xaa Xaa Xaa Leu Pro

 1 10 15 15
- Pro Gln Pro Thr Val Lys Val Tyr Cys Arg Ala Asn Pro Asn Tyr Ala 20 25 30
- Met Xaa Val Arg Xaa Gly Lys Xaa Val Leu Ala Pro Ala Asn Pro Lys 35 40 45
- Asp Glu Tyr Gln His Trp Ile Lys Asp Met Xaa Trp Ser Thr Ser Ile
- Lys Asp Xaa Glu Gly Tyr Pro Ala Phe Xaa Leu Val Asn Xaa Ala Thr 65 70 75 80
- Gly Glu Ala Ile Lys Xaa Leu Ala Gly Gly Ser Pro Thr Arg Cys Ala 85 90 95
- Trp Cys Pro Thr Thr Arg Thr Phe Trp Thr Ser Arg Cys Cys Gly Arg
- Arg Ala Ala Thr Ser Ala Thr Ala Ser Ala Ala Ser Ala Trp Ser Thr 115 120 125
- 145 150 155 160 Thr Thr Ser Ala Gly Arg Ser Ser Pro Thr Thr Glu Pro Thr Asp Asp
- Met Thr Ile Ala Pro Ile Asp Arg Ala His Ala Cys Ile Arg Thr Ser 180 185 190
- Arg Ile Thr Gly Val Leu Ser Pro Glu Ala Ser Phe Ala Cys Met Pro 195 200 205
- Ala Val Ala

210

- (2) INFORMATION FOR SEQ ID NO:3444:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 179 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..179
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576879
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3444:
- Met Xaa Val Arg Xaa Gly Lys Xaa Val Leu Ala Pro Ala Asn Pro Lys

 5 10 15
- Asp Glu Tyr Gln His Trp Ile Lys Asp Met Xaa Trp Ser Thr Ser Ile 20 25 30
- Gly Glu Ala Ile Lys Xaa Leu Ala Gly Gly Ser Pro Thr Arg Cys Ala 50 55 60
- Trp Cys Pro Thr Thr Arg Thr Phe Trp Thr Ser Arg Cys Cys Gly Arg 65 70 75 80
- Arg Ala Ala Thr Ser Ala Thr Ala Ser Ala Ala Ser Ala Trp Ser Thr 85 90 95
- Thr Ser Thr Ser Thr Pro Ser Thr Ala Thr Ser Gly Thr Ala 100 105 110
- Ala Ser Val Thr Ala Pro Thr Ser Cys Ser Gly Ser Gly Ala Arg Ala 115 120 125
- Thr Thr Ser Ala Gly Arg Ser Ser Pro Thr Thr Glu Pro Thr Asp Asp 130 135 140
- Met Thr Ile Ala Pro Ile Asp Arg Ala His Ala Cys Ile Arg Thr Ser 145 150 155 160
- Arg Ile Thr Gly Val Leu Ser Pro Glu Ala Ser Phe Ala Cys Met Pro 165 170 175

Ala Val Ala

- (2) INFORMATION FOR SEQ ID NO:3445:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 727 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..727
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576888
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3445:

cttgctcgct	gcgccgccgc	ctccgacatc	gtcccttcgt	ccccacgagc	aaccgataat	60
ccgccggcgt	tgagatgttg	gtttatcagg	atctcctatc	tggcgacgag	ctcctgtcgg	120
attCcattcA	acctacaagg	agctcgagaa	cGggcgtcct	gtgggaggtc	gagggaaagt	180
gggtcaccca	aggtcctgtt	gatgtggaca	ttggtgccaa	tccatccgcc	gagggtggtg	240
aggacgaaag	cgttgatgac	acagctgtga	aggtggttga	tattgttgac	acattccgtc	300
tacaggagca	acctcctttt	gacaagaaat	catttgtgtc	ttacatcaaa	aaatacatca	360
agaatctcac	tgctgtgttg	gagccagaga	aagcggatga	gttcaaaaag	ggtgtcgagg	420
gtgcaaccaa	gtttctcctt	agcaagctga	aggacctcca	attttttGgt	tggtgagtcc	480
atgaaggatg	atgcgtctgt	ggtattcgcc	tattacaagg	atggtgccac	taatccgaca	540
ttcctctatt	tctctcatgg	tcttaaggag	atcaagtgct	aggcgtgcgg	cgaaattagt	600
tacccatgtt	gggtactatc	tatgtactat	tattatatcc	aaaactatag	ttgtcctggc	660
tgaattgaac	tcaaaagggt	ttgtttgaga	aaaaattgtc	ccaagattgg	attgcttgtt	720
aaagccc						

- (2) INFORMATION FOR SEQ ID NO:3446:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 89 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..89
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576889
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3446:
- Ala Thr Asp Asn Pro Pro Ala Leu Arg Cys Trp Phe Ile Arg Ile Ser 20 25 30
- Tyr Leu Ala Thr Ser Ser Cys Arg Ile Pro Phe Asn Leu Gln Gly Ala 35 40 45
- Arg Glu Arg Ala Ser Cys Gly Arg Ser Arg Glu Ser Gly Ser Pro Lys 50 55 60
- Val Leu Leu Met Trp Thr Leu Val Pro Ile His Pro Pro Arg Val Val 65 70 75 80
- Arg Thr Lys Ala Leu Met Thr Gln Leu 85
- (2) INFORMATION FOR SEQ ID NO:3447:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 133 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..133
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576890
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3447:
- Ser Ile Gln Pro Thr Arg Ser Ser Arg Thr Gly Val Leu Trp Glu Val
 20 25 30
- Glu Gly Lys Trp Val Thr Gln Gly Pro Val Asp Val Asp Ile Gly Ala
 35
 40
 45
- Val Lys Val Val Asp Ile Val Asp Thr Phe Arg Leu Gln Glu Gln Pro 65 70 75 80
 Pro Phe Asp Lys Lys Ser Phe Val Ser Tyr Ile Lys Lys Tyr Ile Lys
- 85 90 95
 Asn Leu Thr Ala Val Leu Glu Pro Glu Lys Ala Asp Glu Phe Lys Lys
- Gly Val Glu Gly Ala Thr Lys Phe Leu Leu Ser Lys Leu Lys Asp Leu
 115 120 125
- Gln Phe Phe Gly Trp
- (2) INFORMATION FOR SEQ ID NO:3448:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 66 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..66

60

```
(D) OTHER INFORMATION: / Ceres Seq. ID 1576891
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3448:
Met Met Arg Leu Trp Tyr Ser Pro Ile Thr Arg Met Val Pro Leu Ile
                                     10
Arg His Ser Ser Ile Ser Leu Met Val Leu Arg Arg Ser Ser Ala Arg
                                 25
Arg Ala Ala Lys Leu Val Thr His Val Gly Tyr Tyr Leu Cys Thr Ile
                            40
Ile Ile Ser Lys Thr Ile Val Val Leu Ala Glu Leu Asn Ser Lys Gly
                        55
Phe Val
65
(2) INFORMATION FOR SEQ ID NO:3449:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 663 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..663
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576896
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3449:
aaacaccgcc gaagaancca gcccaacctt cacgcaccgc atttcccaag ggaaccatac
cagageggea gageetteec eteegeteec eagteecace egeaceetag eecteageaa
                                                                       120
accetaaccg ctcgtcgcca tgaaggacac ctcgttcaag gccaccggCg ccaagcgcaa
                                                                       180
gaaggtcggc ggcGccaagc gcgggctcac ccccttcttc gcgtttttgg ctgagtttag
                                                                       240
gccgcagtac ctggagaagc accctgagct caagggcgta aaggaggtga gcaaggcggc
                                                                       300
tggggagaag tggcgctcta tgtcggatga ggagaaggcg aagtatggca gtagcaagaa
                                                                       360
gcaggatggc aaagcaagca agaaggagaa cactagctcc aagaaggcca aagctgatat
                                                                       420
tcgggaggga gatgaagcag aaggttctaa caagtcaaaa tctgaggttg aggatgatga
                                                                       480
gcaggatggt aatgaggatg aggatgagta aatagtacga tggggaacag cagctttgca
                                                                       540
tttgagtgtt tgctgcttta cttatttttc tatatgctgt tccttttgat gttatatgct
                                                                       600
gtaaggaaaa totgtacatg atggtacott agggtatggc atgctggagt toccotttaa
                                                                       660
CCC
(2) INFORMATION FOR SEO ID NO:3450:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 77 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..77
          (D) OTHER INFORMATION: / Ceres Seq. ID 1576897
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3450:
Lys His Arg Arg Xaa Gln Pro Asn Leu His Ala Pro His Phe Pro
                                    10
Arg Glu Pro Tyr Gln Ser Gly Arg Ala Phe Pro Ser Ala Pro Gln Ser
            20
                                25
His Pro His Pro Ser Pro Gln Gln Thr Leu Thr Ala Arg Arg His Glu
                            40
                                                45
Gly His Leu Val Gln Gly His Arg Arg Gln Ala Gln Glu Gly Arg Arg
                        55
Arg Gln Ala Arg Ala His Pro Leu Leu Arg Val Phe Gly
```

75

- (2) INFORMATION FOR SEQ ID NO:3451:
 - (i) SEQUENCE CHARACTERISTICS:

70

(A) LENGTH: 123 amino acids

(B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..123 (D) OTHER INFORMATION: / Ceres Seq. ID 1576898 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3451: Met Lys Asp Thr Ser Phe Lys Ala Thr Gly Ala Lys Arg Lys Lys Val 10 Gly Gly Ala Lys Arg Gly Leu Thr Pro Phe Phe Ala Phe Leu Ala Glu 25 20 Phe Arg Pro Gln Tyr Leu Glu Lys His Pro Glu Leu Lys Gly Val Lys 40 Glu Val Ser Lys Ala Ala Gly Glu Lys Trp Arg Ser Met Ser Asp Glu 55 Glu Lys Ala Lys Tyr Gly Ser Ser Lys Lys Gln Asp Gly Lys Ala Ser 70 75 Lys Lys Glu Asn Thr Ser Ser Lys Lys Ala Lys Ala Asp Ile Arg Glu 85 90 95 Gly Asp Glu Ala Glu Gly Ser Asn Lys Ser Lys Ser Glu Val Glu Asp 100 105 Asp Glu Gln Asp Gly Asn Glu Asp Glu Asp Glu 120 115 (2) INFORMATION FOR SEQ ID NO:3452: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 63 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..63 (D) OTHER INFORMATION: / Ceres Seq. ID 1576899 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3452: Met Ser Asp Glu Glu Lys Ala Lys Tyr Gly Ser Ser Lys Lys Gln Asp 5 10 Gly Lys Ala Ser Lys Lys Glu Asn Thr Ser Ser Lys Lys Ala Lys Ala 20 25 Asp Ile Arg Glu Gly Asp Glu Ala Glu Gly Ser Asn Lys Ser Lys Ser 40 Glu Val Glu Asp Asp Glu Gln Asp Gly Asn Glu Asp Glu Asp Glu 55 (2) INFORMATION FOR SEQ ID NO:3453: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 829 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..829 (D) OTHER INFORMATION: / Ceres Seq. ID 1576923 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3453:

aaactettt etteaceaga egteeagace tgeteaegge eteecaaact eegeegeege eetgetteea gteteeeetg geaateteeg eettgeaaac eetageeget geeatgeat atetagetee egegaeegee geetetteee teegeaeeee eatetaegta geegeetett eeeggegeeg tteetttete eetgeegeeg teaaageeat egeeagttet geacateeea

tectetecte ecteegeatg geogeeteeg ecqeegttet ettegeegee aceteeegg 300 cactogogtg caccocotco gttoctoogo cocogotcac toctotgaca gtcacggtgt 360 cccacgacga cgccatccta gacgcctccc gactcttcga gaagctgata atcgagactg 420 cctgchtcgA scgcgtcggc cgcgcggacg aagcgcgctc gcgcctgtcc acagccggat 480 gtggagagaG ctacgcccgc ctcctagccg ctcaggttct gttcgtggac gggaagttgg 540 acgaggegat cgcagcattc gaggagcttg cgcgggagga ccccgccgac tatcgccctc 600 tgttctgcca gggcgtgctg tacctcgccc ttggaaggga ggcggaatca gagtccatgc 660 tegagegatg cegegaggte ggeggegacg egetaategt agateegtea etgatgataa 720 cgccgaccgt ggagacggaa ttcgatgggg agaagccgga gccggcqaaq gtttqacctg 780 taactctgca gcggatgatc tcagaataag gtaacactgg cattttggt

- (2) INFORMATION FOR SEQ ID NO:3454:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 270 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..270
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576924
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3454:

Asn Ser Phe Leu His Gln Thr Ser Arg Pro Ala His Gly Leu Pro Asn 1 10 15

Ser Ala Ala Leu Leu Pro Val Ser Pro Gly Asn Leu Arg Leu Ala
20 25 30

Asn Pro Ser Arg Cys His Gly Ile Ser Ser Ser Arg Asp Arg Leu 35 40

Phe Pro Pro His Pro His Leu Arg Ser Arg Leu Phe Pro Ala Pro Phe 50 55 60

Leu Ser Pro Cys Arg Arg Gln Ser His Arg Gln Phe Cys Thr Ser His 65 70 75 80

Pro Leu Pro Pro His Gly Arg Leu Arg Arg Arg Ser Leu Arg Arg 85 90 95

His Leu Pro Gly Thr Arg Val His Pro Leu Arg Ser Ser Ala Pro Ala 100 105 110 His Ser Ser Asp Ser His Gly Val Pro Arg Arg Arg His Pro Arg Arg

Leu Pro Thr Leu Arg Glu Ala Asp Asn Arg Asp Cys Leu Xaa Arg Xaa 130 135 140

Arg Arg Pro Arg Gly Arg Ser Ala Leu Ala Pro Val His Ser Arg Met 145 150 155 160

Trp Arg Glu Leu Arg Pro Pro Pro Ser Arg Ser Gly Ser Val Arg Gly 165 170 175

Arg Glu Val Gly Arg Gly Asp Arg Ser Ile Arg Gly Ala Cys Ala Gly
180 185 190

Gly Pro Arg Arg Leu Ser Pro Ser Val Leu Pro Gly Arg Ala Val Pro
195 200 205

Arg Pro Trp Lys Gly Gly Gly Ile Arg Val His Ala Arg Ala Met Pro 210 215 220

Arg Gly Arg Arg Arg Ala Asn Arg Arg Ser Val Thr Asp Asp Asn 225 230 235 240

Ala Asp Arg Gly Asp Gly Ile Arg Trp Gly Glu Ala Gly Ala Gly Glu
245 250 255

- Gly Leu Thr Cys Asn Ser Ala Ala Asp Asp Leu Arg Ile Arg 260 265 270
- (2) INFORMATION FOR SEQ ID NO:3455:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..257
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576925
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3455:

Thr Leu Phe Phe Thr Arg Arg Pro Asp Leu Leu Thr Ala Ser Gln Thr $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Pro Pro Pro Cys Phe Gln Ser Pro Leu Ala Ile Ser Ala Leu Gln 20 25 30

Thr Leu Ala Ala Ala Met Ala Tyr Leu Ala Pro Ala Thr Ala Ala Ser $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ser Leu Arg Thr Pro Ile Tyr Val Ala Ala Ser Ser Arg Arg Arg Ser 50 55 60

Phe Leu Pro Ala Ala Val Lys Ala Ile Ala Ser Ser Ala His Pro Ile 65 70 75 80

Leu Ser Ser Leu Arg Met Ala Ala Ser Ala Ala Val Leu Phe Ala Ala 85 90 95

Thr Ser Pro Ala Leu Ala Cys Thr Pro Ser Val Pro Pro Pro Pro Leu
100 105 110

Thr Pro Leu Thr Val Thr Val Ser His Asp Asp Ala Ile Leu Asp Ala 115 120 125

Ser Arg Leu Phe Glu Lys Leu Ile Ile Glu Thr Ala Cys Xaa Xaa Arg 130 135 140

Val Gly Arg Ala Asp Glu Ala Arg Ser Arg Leu Ser Thr Ala Gly Cys 150 150 155 160

Gly Glu Ser Tyr Ala Arg Leu Leu Ala Ala Gln Val Leu Phe Val Asp 165 170 175

Gly Lys Leu Asp Glu Ala Ile Ala Ala Phe Glu Glu Leu Ala Arg Glu 180 185 190

Asp Pro Ala Asp Tyr Arg Pro Leu Phe Cys Gln Gly Val Leu Tyr Leu 195 200 205

Ala Leu Gly Arg Glu Ala Glu Ser Glu Ser Met Leu Glu Arg Cys Arg 210 215 220

Glu Val Gly Gly Asp Ala Leu Ile Val Asp Pro Ser Leu Met Ile Thr 225 230 235 240

Pro Thr Val Glu Thr Glu Phe Asp Gly Glu Lys Pro Glu Pro Ala Lys 245 250 255

Val

- (2) INFORMATION FOR SEQ ID NO:3456:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 220 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..220
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576926
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3456:

Met Ala Tyr Leu Ala Pro Ala Thr Ala Ala Ser Ser Leu Arg Thr Pro $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Ile Tyr Val Ala Ala Ser Ser Arg Arg Arg Ser Phe Leu Pro Ala Ala
20 25 30

Val Lys Ala Ile Ala Ser Ser Ala His Pro Ile Leu Ser Ser Leu Arg
35 40 45

Met Ala Ala Ser Ala Ala Val Leu Phe Ala Ala Thr Ser Pro Ala Leu 50 55 60

```
Ala Cys Thr Pro Ser Val Pro Pro Pro Leu Thr Pro Leu Thr Val
                    70
                                        75
Thr Val Ser His Asp Asp Ala Ile Leu Asp Ala Ser Arg Leu Phe Glu
               85
                                    90
Lys Leu Ile Ile Glu Thr Ala Cys Xaa Xaa Arg Val Gly Arg Ala Asp
            100
                               105
                                                   110
Glu Ala Arg Ser Arg Leu Ser Thr Ala Gly Cys Gly Glu Ser Tyr Ala
       115
                           120
Arg Leu Leu Ala Ala Gln Val Leu Phe Val Asp Gly Lys Leu Asp Glu
                       135
                                           140
Ala Ile Ala Ala Phe Glu Glu Leu Ala Arg Glu Asp Pro Ala Asp Tyr
                   150
                                       155
Arg Pro Leu Phe Cys Gln Gly Val Leu Tyr Leu Ala Leu Gly Arg Glu
               165
                                  170
                                                      175
Ala Glu Ser Glu Ser Met Leu Glu Arg Cys Arg Glu Val Gly Gly Asp
           180
                              185
                                                  190
Ala Leu Ile Val Asp Pro Ser Leu Met Ile Thr Pro Thr Val Glu Thr
                          200
       195
Glu Phe Asp Gly Glu Lys Pro Glu Pro Ala Lys Val
    210
                      215
```

- (2) INFORMATION FOR SEQ ID NO:3457:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 600 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..600
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576935
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3457:

gagtgtctcg gtagcttctt ccccattcac attcggccat tctccaccgt ccaaccaacc 60 accggcggcg gcacaaggga agcgaagagg aatcaacgcg atgtctgcga ccacggcggc ggtgcccttc tggcgggcgg ccgggatgac ctacatcggc tactccaaca tctGcgctgc 180 getggtacgg aactgcctca aggagccctt caagtccaag geegegteee gegagaaggt 240 ccatttctcc atctccaagt ggacggatgg caaacaggag aagcccactg tccgcacaga 300 atccgatgaa taaagctctg gtgccatagt ggcatagtcc ttgctacaga tgatttgaag 360 tgttgttgca agtttccgga acatgctatt tagctggctt gattttatag tcaatgctga 420 ataataaata ctttttacga caattgtctt tttcgttgct aattgcactc gccctacctg aatcagtcat gtgaacatca tggaatgctt cagttttgta caaactaaat ttgttgtgct 540 gtccgacaga ttctatgtct ggtccttaaa aataaaggaa taatgaatgt agtgttttcg 600

- (2) INFORMATION FOR SEQ ID NO:3458:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..102
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576936
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3458:

Glu Cys Leu Gly Ser Phe Phe Pro Ile His Ile Arg Pro Phe Ser Thr $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Val Gln Pro Thr Thr Gly Gly Gly Thr Arg Glu Ala Lys Arg Asn Gln
20 25 30

Arg Asp Val Cys Asp His Gly Gly Gly Ala Leu Leu Ala Gly Gly Arg 35 40

Asp Asp Leu His Arg Leu Cln His Leu Arg Cys Ala Gly Thr Glu 50 60

Leu Pro Gln Gly Ala Leu Gln Val Gln Gly Arg Val Pro Arg Glu Gly 65 70 75 80

Pro Phe Leu His Leu Gln Val Asp Gly Trp Gln Thr Gly Glu Ala His 85 90 95

Cys Pro His Arg Ile Arg 100

- (2) INFORMATION FOR SEQ ID NO:3459:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 103 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..103
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576937
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3459:

Ser Val Ser Val Ala Ser Ser Pro Phe Thr Phe Gly His Ser Pro Pro 1 5 10 15

Ser Asn Gln Pro Pro Ala Ala Ala Gln Gly Lys Arg Arg Gly Ile Asn 20 25 30

Ala Met Ser Ala Thr Thr Ala Ala Val Pro Phe Trp Arg Ala Ala Gly 35 40 45

Met Thr Tyr Ile Gly Tyr Ser Asn Ile Cys Ala Ala Leu Val Arg Asn 50 55 60

Cys Leu Lys Glu Pro Phe Lys Ser Lys Ala Ala Ser Arg Glu Lys Val 65 70 75 80

His Phe Ser Ile Ser Lys Trp Thr Asp Gly Lys Gln Glu Lys Pro Thr 85 90 95

Val Arg Thr Glu Ser Asp Glu

100

- (2) INFORMATION FOR SEQ ID NO:3460:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 70 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..70
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576938
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3460:

Met Ser Ala Thr Thr Ala Ala Val Pro Phe Trp Arg Ala Ala Gly Met

1 10 15

Thr Tyr Ile Gly Tyr Ser Asn Ile Cys Ala Ala Leu Val Arg Asn Cys
20 25 30

Leu Lys Glu Pro Phe Lys Ser Lys Ala Ala Ser Arg Glu Lys Val His 35

Phe Ser Ile Ser Lys Trp Thr Asp Gly Lys Gln Glu Lys Pro Thr Val 50 60

Arg Thr Glu Ser Asp Glu

5 70

- (2) INFORMATION FOR SEQ ID NO:3461:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 815 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..815
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576943
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3461:

agetetecce etetageete acetgeceta tacacageca etactgtega tegattgaat ttgaacccac caggatcagg attaggatta cagcatgtcg gcgtccccgg agttgtacag 120 gecegeggaa gseeggeett etegeegtee tgegeeaege ageegetegt gttegeegge 180 gacgactact gctgcaggac gccgacgggc agcgggatct gctacctgag ggagcccacc 240 acgtgcccgc ccgcgccccg gaagccgccg ccgccgccgC cccatgtgca ggaagcgcct 300 cttccaagcg gcggatcagc agcttgctga ggcgggcccc gtccctgtta tcagcatccg 360 cetegacgag etggagegee tetteegeee etgteegeeg eegaceacea ecaceacega 420 caageggege egeteegget eeggeeceag ceceagatee gecaegaaac atggtgetea 480 gctgcagCtg cgcaGcatNg aattgaattg ggttagcgta acgtagcttg cacgcaccaa 540 ccaaccactC ccctttttag tttttgctgc tgcatctgtc tgcttcttgt tgctgcaaca 600 agcaaagcgc aagcggtggc gcttcttttt atttatttat ttatttatta cggagtactt 660 gcttccgttc tcaaatattt gtcatttgat agttcatttc aaaaatttga caaataaaaa 720 agaacgacga agcaagcagt acccacctgt gtaaatcaaa tcaaatatgc aaagttaccg 780 ccatagcaat aaaatcaccc gtgtaaatca gatcg

- (2) INFORMATION FOR SEQ ID NO:3462:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 109 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..109
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576944
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3462:

Ser Ser Pro Pro Leu Ala Ser Pro Ala Leu Tyr Thr Ala Thr Thr Val $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Asp Arg Leu Asn Leu Asn Pro Pro Gly Ser Gly Leu Gly Leu Gln His 20 25 30

Val Gly Val Pro Gly Val Val Gln Ala Arg Gly Xaa Pro Ala Phe Ser 35 40 45

Pro Ser Cys Ala Thr Gln Pro Leu Val Phe Ala Gly Asp Asp Tyr Cys 50 55 60

Cys Arg Thr Pro Thr Gly Ser Gly Ile Cys Tyr Leu Arg Glu Pro Thr 65 70 75 80

Thr Cys Pro Pro Ala Pro Arg Lys Pro Pro Pro Pro Pro Pro His Val 85 90 95

- Gln Glu Ala Pro Leu Pro Ser Gly Gly Ser Ala Ala Cys 100 105
- (2) INFORMATION FOR SEQ ID NO:3463:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 167 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..167
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576945
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3463:

Leu Ser Pro Ser Ser Leu Thr Cys Pro Ile His Ser His Tyr Cys Arg

```
Ser Ile Glu Phe Glu Pro Thr Arg Ile Arg Ile Arg Ile Thr Ala Cys
                               25
Arg Arg Pro Arg Ser Cys Thr Gly Pro Arg Lys Xaa Gly Leu Leu Ala
                           40
Val Leu Arg His Ala Ala Ala Arg Val Arg Arg Arg Leu Leu Leu
                       55
Gln Asp Ala Asp Gly Gln Arg Asp Leu Leu Pro Glu Gly Ala His His
                   70
                                       75
Val Pro Ala Arg Ala Pro Glu Ala Ala Ala Ala Ala Ala Pro Cys Ala
               85
                                   90
Gly Ser Ala Ser Ser Lys Arg Arg Ile Ser Ser Leu Leu Arg Arg Ala
                               105
                                                 110
Pro Ser Leu Leu Ser Ala Ser Ala Ser Thr Ser Trp Ser Ala Ser Ser
                           120
                                              125
Ala Pro Val Arg Arg Pro Pro Pro Pro Thr Ser Gly Ala Ala
                      135
                               140
Pro Ala Pro Ala Pro Ala Pro Asp Pro Pro Arg Asn Met Val Leu Ser
                   150
                                      155
Cys Ser Cys Ala Ala Xaa Asn
               165
```

- (2) INFORMATION FOR SEQ ID NO:3464:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 958 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..958
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576950
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3464:

angtotcago accogatoco agtaacogot googatotot cotogtoatt togtogtogt 60 ctccatctcg cttttgatcg actcagaaaa ttccccacca aaatctcctc cccctgaagt 120 cccgaagctc geggaagscc gagatgtacc atcccacgag aggcggcgtc cgcggcggca 180 gagatcaatt caaatgggac gatgtgaagg ttgacaagca tcgggagaat taccttggtc 240 atagtgttaa ggctccggtt ggtagatggc agaaaggaaa ggatctttac tggtatactc 300 gggataagaa atccgacacg gaagatgctc ttaaggaaga aatcaggaga gtgaaggaag 360 aggaggaaca ggctatgcgt gaggctcttg gcttagctcc taagcgcaGc aatcgaactc 420 agggtaatcg cttggataag catgaatatg ctgagctgat taagagagga tcaactgcgg 480 aggacttggg agcagggcac gctgaagcag cacaagtgca gggtctagga ttgtacaagg 540 cccctcgcga tgagggtgga tcaagttctt tgagccttga ccctcaaatg gagcctgagc 600 aggctgaacc cctactagca cccaagcagg aggatgattt ggaagataat aggaagggga 660 aaaggccacg tgaacgtgac gagaagaga gggagaagga gcggaaacga gacaggcatg 720 gtgatggaaa ggagaggagg cgggacaagc acgagaggag gcacgacttg gaggacagat 780 caaagcggca ccgcaaagac aagcagaaga ggaggcacga ttccgattct qattgataac 840 ggccctgcgc ctgctcctgt atgactactg tatactgcga aatttcaaac ccatggagcc 900 gcttttgttt gatgtatgcc tacgctttaa attatgtttg ccctaatgat gtttaagg

- (2) INFORMATION FOR SEQ ID NO:3465:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 230 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..230
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576951
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3465:

Met Tyr His Pro Thr Arg Gly Gly Val Arg Gly Gly Arg Asp Gln Phe

10 Lys Trp Asp Asp Val Lys Val Asp Lys His Arg Glu Asn Tyr Leu Gly 25 His Ser Val Lys Ala Pro Val Gly Arg Trp Gln Lys Gly Lys Asp Leu 40 Tyr Trp Tyr Thr Arg Asp Lys Lys Ser Asp Thr Glu Asp Ala Leu Lys Glu Glu Ile Arg Arg Val Lys Glu Glu Glu Glu Gln Ala Met Arg Glu 70 75 Ala Leu Gly Leu Ala Pro Lys Arg Ser Asn Arg Thr Gln Gly Asn Arg 85 90 Leu Asp Lys His Glu Tyr Ala Glu Leu Ile Lys Arg Gly Ser Thr Ala 100 105 Glu Asp Leu Gly Ala Gly His Ala Glu Ala Ala Gln Val Gln Gly Leu 120 125 Gly Leu Tyr Lys Ala Pro Arg Asp Glu Gly Gly Ser Ser Ser Leu Ser 135 140 Leu Asp Pro Gln Met Glu Pro Glu Gln Ala Glu Pro Leu Leu Ala Pro 150 155 Lys Gln Glu Asp Asp Leu Glu Asp Asn Arg Lys Gly Lys Arg Pro Arg 165 170 175 Glu Arg Asp Glu Lys Arg Gly Glu Lys Glu Arg Lys Arg Asp Arg His 185 Gly Asp Gly Lys Glu Arg Arg Arg Asp Lys His Glu Arg Arg His Asp 195 200 205 Leu Glu Asp Arg Ser Lys Arg His Arg Lys Asp Lys Gln Lys Arg Arg 210 215 His Asp Ser Asp Ser Asp

- (2) INFORMATION FOR SEQ ID NO:3466:
 - (i) SEQUENCE CHARACTERISTICS:

230

- (A) LENGTH: 153 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..153
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576952
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3466:
- Met Arg Glu Ala Leu Gly Leu Ala Pro Lys Arg Ser Asn Arg Thr Gln 1 5 10
- Gly Asn Arg Leu Asp Lys His Glu Tyr Ala Glu Leu Ile Lys Arg Gly 20 25 30
- Ser Thr Ala Glu Asp Leu Gly Ala Gly His Ala Glu Ala Ala Gln Val 35 40 45
- Gln Gly Leu Gly Leu Tyr Lys Ala Pro Arg Asp Glu Gly Gly Ser Ser 50 55 60
 Ser Leu Ser Leu Asp Pro Gln Met Glu Pro Glu Gln Ala Glu Pro Leu
- Leu Ala Pro Lys Gln Glu Asp Asp Leu Glu Asp Asn Arg Lys Gly Lys
 85
 90
 95
- Arg Pro Arg Glu Arg Asp Glu Lys Arg Gly Glu Lys Glu Arg Lys Arg 100 105 110 Asp Arg His Gly Asp Gly Lys Glu Arg Arg Arg Asp Lys His Glu Arg
- 115 120 125 Arg His Asp Leu Glu Asp Arg Ser Lys Arg His Arg Lys Asp Lys Gln 130 135 140
- Lys Arg Arg His Asp Ser Asp
- 145 150

- (2) INFORMATION FOR SEQ ID NO:3467:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 618 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..618
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576959
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3467:

gccgcaaaac gcaggtgcat gcgtcqtcqc caaqccccaa qqccaqtctq aqtqtqcqtt cgattcgctt gtgctgcagc tagggtttag aggttttctg ggcgcngagC Gqqadqcqqc 120 ggcggctatg gctgcggcgg aggaggagat cgcggtgaag gagccgctgg atctgatacg 180 cctcagcctc gacgagcgca tctacgtcaa gctccgatcc gaccqcqaqC tqcqcqcaa 240 gctccatgcg tatgatcaac atttaaacat gatacttgga gatgttgaag aggtcgtgac 300 aactgttgag atagatgatg aaacatatga agaaattgtg cgcaccacga aacgcactat 360 cccctttctt tttgtccgag gtgatggtgt catattggtt tctccacccc ttcgtacggc 420 atgaagtttg aagttagatc atgctggttg ttaattatga taactggtgt atttggccac 480 ttgatggcgt tgcatggagt gGtatgttat gggcctagcc gctacttttt ctgatgggat 540 gtaggtttaa catgtgatac aatcgtgtaa acaactgctt gtgcttggat tatctgtegg 600 atctcagggg ttcttccc

- (2) INFORMATION FOR SEQ ID NO:3468:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 140 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..140
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576960
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3468:

Pro Gln Asn Ala Gly Ala Cys Val Val Ala Lys Pro Gln Gly Gln Ser

1 10 15

Glu Cys Ala Phe Asp Ser Leu Val Leu Gln Leu Gly Phe Arg Gly Phe 20 25 30

Leu Gly Xaa Glu Arg Xaa Ala Ala Ala Ala Met Ala Ala Glu Glu 35 40 45

Glu Ile Ala Val Lys Glu Pro Leu Asp Leu Ile Arg Leu Ser Leu Asp 50 55 60
Glu Arg Ile Tyr Val Lys Leu Arg Ser Asp Arg Glu Leu Arg Gly Lys

65 70 75 80
Leu His Ala Tyr Asp Gln His Leu Asn Met Ile Leu Gly Asp Val Glu

85 90 95
Glu Val Val Thr Thr Val Glu Ile Asp Asp Glu Thr Tyr Glu Glu Ile
100 105 110

Val Arg Thr Thr Lys Arg Thr Ile Pro Phe Leu Phe Val Arg Gly Asp
115 120 125

- Gly Val Ile Leu Val Ser Pro Pro Leu Arg Thr Ala 130 135 140
- (2) INFORMATION FOR SEQ ID NO:3469:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 98 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..98
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576961
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3469:

Met Ala Ala Ala Glu Glu Glu Ile Ala Val Lys Glu Pro Leu Asp Leu 1 5 10 15

Ile Arg Leu Ser Leu Asp Glu Arg Ile Tyr Val Lys Leu Arg Ser Asp 20 25 30

Arg Glu Leu Arg Gly Lys Leu His Ala Tyr Asp Gln His Leu Asn Met 35 40 45

Ile Leu Gly Asp Val Glu Glu Val Val Thr Thr Val Glu Ile Asp Asp 50 55 60

Glu Thr Tyr Glu Glu Ile Val Arg Thr Thr Lys Arg Thr Ile Pro Phe 65 70 75 80
Leu Phe Val Arg Gly Asp Gly Val Ile Leu Val Ser Pro Pro Leu Arg

85 90 95

Thr Ala

- (2) INFORMATION FOR SEQ ID NO:3470:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 960 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..960
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576970
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3470:

accaccacca ccaagccagc aggtgctgcg atacattgca cacaacaaca accccagctc 60 tgccccagcc cgcccacagg agttcccgca tctccctctg gtctggtcac aggagttccg 120 agacctetec aatggeggtt aagatetaeg ttgtgtacta tteeatgtat gggeatgttg 180 gcaaactagc tgaagagatc aagaaaggtg ccttatctgt tgaaggtgtt gaggctaaaa 240 tatggcaggt ccctgaaatt ctctctgaag aagtgcttgg aaagatgggc gcgccccta 300 agcccgacgt gccagtcatc acaccgcaga acttgcagag gctgacggta tcctctttgg 360 gttcccgaca aggttcggaa tgatggcagc tcagatgaag gcgttcttcg atgccaccgg 420 tgggctctgg agggagcaga gcctcgctgg caaGcctgcc ggcatgttct tcaqcactqq 480 aacccagggt ggtggccaag agactacacc gctgacggcg attacccagt tqacqcacca 540 cggcatggtg tttgtgcccg tgggctacac ttcggcgcca agctgttcgg catggaccag 600 gtccagggtg gcagcccta cggcgccggc acgttcgncg ccgacggctc qaqqtqqccq 660 agcgaggtgg agctggagca cgccttccac caggggaaat acttcqcqqq catcqccaaq 720 aagytcaagg gctctgcttg atctgcacat acccctctgt cagatatcat aaaacattta 780 cagattegte ataccegtea cegteaatag attggtetgt gttetetegt ggtgeetega 840 tgctatgtag ttcattggta ctgctgccgt atgaatttcg atgattgctc tggtgacttq 900 gtttgtaatt tggagttgga ctatcgttgt ttctgccgca taaatttcga tgatttggtc 960

- (2) INFORMATION FOR SEQ ID NO:3471:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 126 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..126
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576971
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3471:

His His His Gln Ala Ser Arg Cys Cys Asp Thr Leu His Thr Thr 1 5 10 15

- (2) INFORMATION FOR SEQ ID NO:3472:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 130 amino acids

120

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:

115

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..130
- (D) OTHER INFORMATION: / Ceres Seq. ID 1576972
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3472:

Met Met Ala Ala Gln Met Lys Ala Phe Phe Asp Ala Thr Gly Gly Leu

5 10 15

Trp Arg Glu Gln Ser Leu Ala Gly Lys Pro Ala Gly Met Phe Phe Ser 20 25 30

Thr Gly Thr Gln Gly Gly Gln Glu Thr Thr Pro Leu Thr Ala Ile 35 40 45

Thr Gln Leu Thr His His Gly Met Val Phe Val Pro Val Gly Tyr Thr 50 55 60

Ser Ala Pro Ser Cys Ser Ala Trp Thr Arg Ser Arg Val Ala Ala Pro 65 70 75 80

Thr Ala Pro Ala Arg Ser Xaa Pro Thr Ala Arg Gly Gly Arg Ala Arg 85 90 95 Trp Ser Trp Ser Thr Pro Ser Thr Arg Gly Asn Thr Ser Arg Ala Ser

Trp Ser Trp Ser Thr Pro Ser Thr Arg Gly Asn Thr Ser Arg Ala Ser

100
105
110

Pro Arg Xaa Ser Arg Ala Leu Leu Asp Leu His Ile Pro Leu Cys Gln
115 120 125

Ile Ser

130

- (2) INFORMATION FOR SEQ ID NO:3473:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 129 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..129
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576973
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3473:

Met Ala Ala Gln Met Lys Ala Phe Phe Asp Ala Thr Gly Gly Leu Trp $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Arg Glu Gln Ser Leu Ala Gly Lys Pro Ala Gly Met Phe Phe Ser Thr 20 25 30

Gly Thr Gln Gly Gly Gln Glu Thr Thr Pro Leu Thr Ala Ile Thr

35 40 Gln Leu Thr His His Gly Met Val Phe Val Pro Val Gly Tyr Thr Ser 5.5 Ala Pro Ser Cys Ser Ala Trp Thr Arg Ser Arg Val Ala Ala Pro Thr 70 Ala Pro Ala Arg Ser Xaa Pro Thr Ala Arg Gly Gly Arg Ala Arg Trp 85 90 Ser Trp Ser Thr Pro Ser Thr Arg Gly Asn Thr Ser Arg Ala Ser Pro 100 105 110 Arg Xaa Ser Arg Ala Leu Leu Asp Leu His Ile Pro Leu Cys Gln Ile 120 Ser

- (2) INFORMATION FOR SEQ ID NO:3474:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 877 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..877
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576996
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3474: gtcatcacaa actcactaca cgatcggcta tagcgagcta acagaagctc tatcaagtac 60 tgtgtaggec atggeeggag eestegtett egtegetgtt etectegeeg caagegtegg 120 cgctacgacg gctaccacgc tgaccatcca caacctctgc ccccacccgg tgtggccgct 180 ggtgaccccg agctcgggct tcccctccat ctccaccaac accgcgcggc tgggccccaa egegetgete teceteteet tecegeceae ettetgggee ggeegegteg eegegegeae gggctgcgac gccgccgcgt ccggctgctg gacggggacc acgccgcccg ccaccgtcgt gcaggtcacc gtccacgacg gcgggaacct ggaccaggcc acctacagcg tgtctctcgt cgacggette aacgtgeeca tggtggteag ceegeaGgee gteggeggeg ggeagtgCee ggcgctcggg tgccccatca acctcaactg cgactgccct ccccagaacc gcaccgccga nggngnctcy gtgccgcggc ccgccggagt acttcaagaa ccggtgcccg ytcaccagga ccacgcccac cgacgtcgag cccgtgaccg cagagctgcc gcgccccggg ggagctcaag gtcatcttct gccaggcgac catcgtcaca tgcggcggcg aagcagagcg caccgtcctc 720 geogacaget agacagateg agoogtocag etecattege etecaggice getgaateet 780 tacagtaatt gtcatgcttt cttttgctcc atgtgtttgt tagctttggc ttcgacgcgc gtgtactccg gtggttttat tttagaaatc agcagtg
- (2) INFORMATION FOR SEQ ID NO:3475:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 234 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..234
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576997
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3475:
- Met Ala Gly Ala Leu Val Phe Val Ala Val Leu Leu Ala Ala Ser Val 1 5 10 15
- Gly Ala Thr Thr Ala Thr Thr Leu Thr Ile His Asn Leu Cys Pro His 20 25 30
- Pro Val Trp Pro Leu Val Thr Pro Ser Ser Gly Phe Pro Ser Ile Ser 35 40 45
- Thr Asn Thr Ala Arg Leu Gly Pro Asn Ala Leu Leu Ser Leu Ser Phe 50 55 60
- Pro Pro Thr Phe Trp Ala Gly Arg Val Ala Ala Arg Thr Gly Cys Asp

```
65
                    70
                                        75
Ala Ala Ala Ser Gly Cys Trp Thr Gly Thr Thr Pro Pro Ala Thr Val
                85
                                    90
Val Gln Val Thr Val His Asp Gly Gly Asn Leu Asp Gln Ala Thr Tyr
                                105
                                                   110
Ser Val Ser Leu Val Asp Gly Phe Asn Val Pro Met Val Val Ser Pro
                            120
                                               125
Gln Ala Val Gly Gly Gln Cys Pro Ala Leu Gly Cys Pro Ile Asn
                        135
                                           140
Leu Asn Cys Asp Cys Pro Pro Gln Asn Arg Thr Ala Xaa Xaa Xaa
                    150
                                       155
Val Pro Arg Pro Ala Gly Val Leu Gln Glu Pro Val Pro Xaa His Gln
               165
                                   170
Asp His Ala His Arg Arg Arg Ala Arg Asp Arg Arg Ala Ala Pro
                               185
           180
                                                   190
Arg Gly Ser Ser Arg Ser Ser Ser Ala Arg Arg Pro Ser Ser His Ala
                           200
       195
                                               205
Ala Ala Lys Gln Ser Ala Pro Ser Ser Pro Thr Ala Arg Gln Ile Glu
    210
                       215
                                            220
Pro Ser Ser Ser Ile Arg Leu Gln Val Arg
225
                   230
(2) INFORMATION FOR SEQ ID NO:3476:
     (i) SEQUENCE CHARACTERISTICS:
```

- (A) LENGTH: 893 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..893
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576998
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3476: aaaaacccaa gcacagcagc aggtagaccg ctgcagcaaa accgcncccc accgctwccc 60 cgtwmcccac cccgaccgac tgctcccct ccccgcacc agcctcaagg catcgccggc 120 gccgcaacat cgctgaggaa gcccgcaccc ctgcccggat ccgatggcca acagcaacct 180 cccgcggcgg atcatcaagg agactcagcg gctgctcagc gagccagcac cggggatcag 240 cgcgtcgccc tcggaGgaga acatgcgcta cttcaacgtt atgatccttG gggccggcqc 300 agtcgcccta tgaaggtgga gtttttaagc ttgaactctt tttacctgag gaatatccaa 360 tggctgcccc aaaggttagg tctctgacaa agatctatca tcccaacatc gacaagcttg 420 gtaggatatg cctcgacatt ctcaaggaca aatggagccc agcacttcag attcgaacag 480 ttcttttgag tatacaggct ctactgagtg cgccaaatcc agacgaccct ctttcggata 540 acattgcaaa gcactggaaa gccaatgagg tagaagctgt tgaaacagct aaggagtgga 600 ctcgcctgta tgcgagcggt gcatgagaac gcagtgatgt tcttgatgta ataacccatc 660 atacttcagt cctcatctat tgccatttgt ttgataaaaa ataggctgga gatatttgcc 720 atggaatgaa gtctctacat gactatcact ctgaattgtt tggttgtaca cctgtggtcg 780 gttcccttta ccttggggca cctttgacaa atcagtatct gtggtagaac ttgctgatac 840 tgtaatatat ttgttacttc atgtagaaga gcttctcaac tgtccatatt gtc
- (2) INFORMATION FOR SEQ ID NO:3477:
 - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..128
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1576999
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3477:

Lys Asn Pro Ser Thr Ala Ala Gly Arg Pro Leu Gln Gln Asn Arg Xaa

5 10 Pro Pro Xaa Pro Arg Xaa Pro Pro Arg Pro Thr Ala Pro Pro Pro 25 His Gln Pro Gln Gly Ile Ala Gly Ala Ala Thr Ser Leu Arg Lys Pro 40 Ala Pro Leu Pro Gly Ser Asp Gly Gln Gln Pro Pro Ala Ala Asp 55 His Gln Gly Asp Ser Ala Ala Ala Gln Arg Ala Ser Thr Gly Asp Gln 70 75 Arg Val Ala Leu Gly Gly Glu His Ala Leu Leu Gln Arg Tyr Asp Pro 90 Trp Gly Arg Arg Ser Arg Pro Met Lys Val Glu Phe Leu Ser Leu Asn 105 Ser Phe Tyr Leu Arg Asn Ile Gln Trp Leu Pro Gln Arg Leu Gly Leu 115 120

(2) INFORMATION FOR SEQ ID NO:3478:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 88 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..88
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577000
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3478:
- Ile Asp Lys Leu Gly Arg Ile Cys Leu Asp Ile Leu Lys Asp Lys Trp 20 25 30
- Ser Pro Ala Leu Gln Ile Arg Thr Val Leu Leu Ser Ile Gln Ala Leu 35 40 45
- Leu Ser Ala Pro Asn Pro Asp Asp Pro Leu Ser Asp Asn Ile Ala Lys 50 55 60
- His Trp Lys Ala Asn Glu Val Glu Ala Val Glu Thr Ala Lys Glu Trp 65 70 75 80
- Thr Arg Leu Tyr Ala Ser Gly Ala 85
- (2) INFORMATION FOR SEQ ID NO:3479:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 636 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..636
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577001
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3479:

accaccagge accageatag atetegttet egecactatt attetgeaca geaacgeate 60 aagcetteta gaaccatete geegeegeea caccacaace egtegaageg aaGcaagcaa 120 tggccggagt cggatcgaag gccctcgccg ttgccgccgt tctggcggcc gtctccctct 180 eggtggeege egeggeegag gegeeggege ceageceegt eNteegCege egtegeggek 240 tegtegeeet tegeegegge eetegtegee teegeegeeg eetteetett egeegeegte 300 egecactgag eegatgggge etegtgeetg eaggetacet ageagtactt eegeegetge 360 tgccgccgcc gcctagatct atttattgga gtgctatcca gtagtactag tagtagtgag 420 atttcttcgg tgctgtcgtg tcgtcgtcgc attttggtcg gatctggttt ccttggtgca 480 gggagggttt ctataccatg tcgcggtgtc Gggttgtgtg atctcatccc cccttgtaga 540 tagtactctg ctatctcgtc gtgatcgtga gtggtgattc tgtctggttg atatttgcta 600 ctgatattgg tcccatttga gatatgcgtt gctgct

- (2) INFORMATION FOR SEQ ID NO:3480:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..102
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577002
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3480:

Thr Thr Arg His Gln His Arg Ser Arg Ser Arg His Tyr Tyr Ser Ala

1 10 15

Gln Gln Arg Ile Lys Pro Ser Arg Thr Ile Ser Pro Pro Pro His His 20 25 30

Asn Pro Ser Lys Arg Ser Lys Gln Trp Pro Glu Ser Asp Arg Pro 35 40 45

Ser Pro Leu Pro Pro Phe Trp Arg Pro Ser Pro Ser Arg Trp Pro Pro 50 55 60

Arg Pro Arg Arg Arg Pro Ala Pro Xaa Ser Ala Ala Val Ala Xaa 65 70 75 80

Ser Ser Pro Phe Ala Ala Ala Leu Val Ala Ser Ala Ala Ala Phe Leu 85 90 95

Phe Ala Ala Val Arg His

100

- (2) INFORMATION FOR SEQ ID NO:3481:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 124 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..124
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577003
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3481:

Pro Pro Gly Thr Ser Ile Asp Leu Val Leu Ala Thr Ile Ile Leu His 1 5 10 15

Ser Asn Ala Ser Ser Leu Leu Glu Pro Ser Arg Arg Arg His Thr Thr 20 25 30

Thr Arg Arg Ser Glu Ala Ser Asn Gly Arg Ser Arg Ile Glu Gly Pro 35 40 45

Arg Arg Cys Arg Arg Ser Gly Gly Arg Leu Pro Leu Gly Gly Arg Arg 50 55 60

Gly Arg Gly Ala Gly Ala Gln Pro Arg Xaa Pro Pro Pro Ser Arg Xaa 65 70 75 80

Arg Arg Pro Ser Pro Arg Pro Ser Ser Pro Pro Pro Pro Pro Ser Ser Ser 85 90 95

Ser Pro Pro Ser Ala Thr Glu Pro Met Gly Pro Arg Ala Cys Arg Leu 100 105 110

Pro Ser Ser Thr Ser Ala Ala Ala Ala Ala Ala Ala 115 120

- (2) INFORMATION FOR SEQ ID NO:3482:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 94 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..94
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577004
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3482:

Met Ala Gly Val Gly Ser Lys Ala Leu Ala Val Ala Ala Val Leu Ala 1 5 10 15

Ala Val Ser Leu Ser Val Ala Ala Ala Ala Glu Ala Pro Ala Pro Ser 20 25 30

Pro Val Xaa Arg Arg Arg Gly Xaa Val Ala Leu Arg Arg Gly Pro 35 40 45

Arg Arg Leu Arg Arg Arg Leu Pro Leu Arg Arg Pro Pro Leu Ser 50 55

Arg Trp Gly Leu Val Pro Ala Gly Tyr Leu Ala Val Leu Pro Pro Leu 65 70 75 80

Leu Pro Pro Pro Arg Ser Ile Tyr Trp Ser Ala Ile Gln 85 90

- (2) INFORMATION FOR SEQ ID NO:3483:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 722 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..722
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577048
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3483:

ccggaaactg gtaccatccg ccgmcgcagc catccgcttg ttctcttcgg ttcagttctc 60 gagtttccag gatgaaggta atagctgcct atctgcttgc tgttctgggt ggaaacactt 120 ccccgactgc tgatgatgtt aagagcattc tggaatcagt tggtgctgaa gctgatgaag 180 aaaaactaga gttcctgctc acagaactca aagacaagga cataacagaa gtgattgcag 240 ctggaaggga aaggttatcc tctgtgcctt caggtggtgg tgcaattgac atgggagctc 300 cagcagctgt agctggcggt ggcgcaGcac ctgctGgaag aggcaaagaa ggaagaaaaq 360 gttgaagaga aggaagagtc tgatgragat atgggtttca gcttgttcga ttaaaacagc 420 actaccagtt tacagtttct tcgcgaatgg tctcataata ttggccggtt tccacaaaat 480 aagattgtcA atagctacta cgtacttatg ctattctgca tgtgatgtac gagtgtgcat 540 cttcaagaat ctttaagttg aatggtcggt ggtcccataa taatattggt aacaatgtaa 600 attgtatgtc ctgtacgtac tttggtatcg cgacatctca gtgtgcatct tcaaggatca 660 taagttgaat gttatcatta aggtcagttt ggttcagata aatataattg ctagttatag 720

- (2) INFORMATION FOR SEQ ID NO:3484:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 120 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..120
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577049
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3484:

Gly Asn Trp Tyr His Pro Pro Xaa Gln Pro Ser Ala Cys Ser Leu Arg 10 10 15

Phe Ser Ser Arg Val Ser Arg Met Lys Val Ile Ala Ala Tyr Leu Leu 20 25 30

```
Client Docket No. 80145.003
Ala Val Leu Gly Gly Asn Thr Ser Pro Thr Ala Asp Asp Val Lys Ser
                            40
Ile Leu Glu Ser Val Gly Ala Glu Ala Asp Glu Glu Lys Leu Glu Phe
                        55
                                            60
Leu Leu Thr Glu Leu Lys Asp Lys Asp Ile Thr Glu Val Ile Ala Ala
                    70
                                        75
Gly Arg Glu Arg Leu Ser Ser Val Pro Ser Gly Gly Ala Ile Asp
                85
                                    90
Met Gly Ala Pro Ala Ala Val Ala Gly Gly Ala Ala Pro Ala Gly
           100
                                105
Arg Gly Lys Glu Gly Arg Lys Gly
        115
                            120
(2) INFORMATION FOR SEQ ID NO:3485:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 97 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
```

- (B) LOCATION: 1..97
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577050
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3485: Met Lys Val Ile Ala Ala Tyr Leu Leu Ala Val Leu Gly Gly Asn Thr 10 Ser Pro Thr Ala Asp Asp Val Lys Ser Ile Leu Glu Ser Val Gly Ala 20 25 30 Glu Ala Asp Glu Glu Lys Leu Glu Phe Leu Leu Thr Glu Leu Lys Asp 40 Lys Asp Ile Thr Glu Val Ile Ala Ala Gly Arg Glu Arg Leu Ser Ser 55 Val Pro Ser Gly Gly Gly Ala Ile Asp Met Gly Ala Pro Ala Ala Val 7.0 75 Ala Gly Gly Gly Ala Ala Pro Ala Gly Arg Gly Lys Glu Gly Arg Lys Gly
- (2) INFORMATION FOR SEQ ID NO:3486:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 831 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..831
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577058
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3486:

accectcate tteetetet teeteceaa ecteggteae eagteeateg atectegaat 60 egetegeetg caetgeactg caaggtacat aegecatgaa getgageatg cetttetteg 120 gctcgtcttc ctcctcctcc ggcaagaaga ggaaggggtc aaagaccggc ggctcctctt 180 cettegtete cacegegteg tegteetegt eegaegagtg egeategeeg teageegtea 240 cgacgacgcc acgcaccgtc ctccaatccc agccgtccgc ccccaacccg aaGcctccgg 300 cggNtagtag ccgccgccgt gacgcgggag gacctggagg tggcGctgcg ccggqtqqtc 360 cgcagcgagg acgagctggc cgcggtgctg gccgaggcgg aggccNgccG Ggctcgcqcc 420 cgagcaggcc gcgtccgcGg aggcggagga cgaggccgag ctCcgcgacg cgttcgcggt 480 gttcgacgcg gacggcgacg gcaggatctc cgcggaggas tccgcgccgt gctcgccgcg 540 cteggegacg cegectgete egtegaggae tgeegeegea tgateggeeg egtegaegge 600 gatggcgacg gettegtetg ettecaegae ttetegegea tgatgatgca gggggegtga 660 ttctggcgtc gtcgtgcctg gctgggttgt gtcggtctcc gcgtgtttct tctgttgcaa 720 aatctctcta cctgtatgtg gacctgtttt ttcggtgtca tctactcgta tcatctccgt 780 cgtqcgagat gaatgaaccc aaaagagatc tatatatttt catcttttcc g

- (2) INFORMATION FOR SEQ ID NO:3487:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 276 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..276
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577059
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3487:

Pro Ser Ser Ser Pro Ser Leu Pro Thr Ser Val Thr Ser Pro Ser

1 10 15

Ile Leu Glu Ser Leu Ala Cys Thr Ala Leu Gln Gly Thr Tyr Ala Met 20 25 30

Lys Leu Ser Met Pro Phe Phe Gly Ser Ser Ser Ser Ser Gly Lys
35 40 45

Lys Arg Lys Gly Ser Lys Thr Gly Gly Ser Ser Ser Phe Val Ser Thr

Ala Ser Ser Ser Ser Ser Asp Glu Cys Ala Ser Pro Ser Ala Val Thr 65 70 75 80

Thr Thr Pro Arg Thr Val Leu Gln Ser Gln Pro Ser Ala Pro Asn Pro 85 90 95

Lys Pro Pro Ala Xaa Ser Ser Arg Arg Arg Asp Ala Gly Gly Pro Gly
100 105 110

Gly Gly Ala Ala Pro Gly Gly Pro Gln Arg Gly Arg Ala Gly Arg Gly
115 120 125

Ala Gly Arg Gly Gly Gly Xaa Pro Gly Ser Arg Pro Ser Arg Pro Arg 130 135 140

Pro Arg Arg Arg Thr Arg Pro Ser Ser Ala Thr Arg Ser Arg Cys 145 150 155 160

Ser Thr Arg Thr Ala Thr Ala Gly Ser Pro Arg Arg Xaa Pro Arg Arg
165 170 175

Ala Arg Arg Ala Arg Arg Arg Leu Leu Arg Arg Gly Leu Pro Pro
180 185 190

His Asp Arg Pro Arg Arg Arg Trp Arg Arg Leu Arg Leu Leu Pro
195 200 205

Arg Leu Leu Ala His Asp Asp Ala Gly Gly Val Ile Leu Ala Ser Ser 210 215 220

Cys Leu Ala Gly Leu Cys Arg Ser Pro Arg Val Ser Ser Val Ala Lys 225 230 235 240

Ser Leu Tyr Leu Tyr Val Asp Leu Phe Phe Arg Cys His Leu Leu Val 245 250 255

Ser Ser Pro Ser Cys Glu Met Asn Glu Pro Lys Arg Asp Leu Tyr Ile 260 265 270

Phe Ile Phe Ser 275

(2) INFORMATION FOR SEQ ID NO:3488:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 245 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..245

(D) OTHER INFORMATION: / Ceres Seq. ID 1577060 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3488: Met Lys Leu Ser Met Pro Phe Phe Gly Ser Ser Ser Ser Ser Gly 1.0 Lys Lys Arg Lys Gly Ser Lys Thr Gly Gly Ser Ser Ser Phe Val Ser 20 25 Thr Ala Ser Ser Ser Ser Asp Glu Cys Ala Ser Pro Ser Ala Val 4.0 Thr Thr Pro Arg Thr Val Leu Gln Ser Gln Pro Ser Ala Pro Asn 55 Pro Lys Pro Pro Ala Xaa Ser Ser Arg Arg Arg Asp Ala Gly Gly Pro 70 75 Gly Gly Gly Ala Ala Pro Gly Gly Pro Gln Arg Gly Arg Ala Gly Arg 90 Gly Ala Gly Arg Gly Gly Kaa Pro Gly Ser Arg Pro Ser Arg Pro 105 110 Arg Pro Arg Arg Arg Thr Arg Pro Ser Ser Ala Thr Arg Ser Arg 120 115 125 Cys Ser Thr Arg Thr Ala Thr Ala Gly Ser Pro Arg Arg Xaa Pro Arg 135 140 Arg Ala Arg Arg Ala Arg Arg Arg Leu Leu Arg Arg Gly Leu Pro 145 150 155 Pro His Asp Arg Pro Arg Arg Arg Trp Arg Arg Leu Arg Leu Leu 165 170 175 Pro Arg Leu Leu Ala His Asp Asp Ala Gly Gly Val Ile Leu Ala Ser 180 185 190 Ser Cys Leu Ala Gly Leu Cys Arg Ser Pro Arg Val Ser Ser Val Ala 195 200 205 Lys Ser Leu Tyr Leu Tyr Val Asp Leu Phe Phe Arg Cys His Leu Leu 210 215 220 Val Ser Ser Pro Ser Cys Glu Met Asn Glu Pro Lys Arg Asp Leu Tyr 225 230 235 Ile Phe Ile Phe Ser 245 (2) INFORMATION FOR SEQ ID NO:3489: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 241 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..241 (D) OTHER INFORMATION: / Ceres Seq. ID 1577061 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3489: Met Pro Phe Phe Gly Ser Ser Ser Ser Ser Gly Lys Lys Arg Lys 5 10 15 Gly Ser Lys Thr Gly Gly Ser Ser Ser Phe Val Ser Thr Ala Ser Ser 25 Ser Ser Ser Asp Glu Cys Ala Ser Pro Ser Ala Val Thr Thr Thr Pro 4 0 Arg Thr Val Leu Gln Ser Gln Pro Ser Ala Pro Asn Pro Lys Pro Pro 55 Ala Xaa Ser Ser Arg Arg Asp Ala Gly Gly Pro Gly Gly Ala 75 70 Ala Pro Gly Gly Pro Gln Arg Gly Arg Ala Gly Arg Gly Ala Gly Arg 85 90

Gly Gly Xaa Pro Gly Ser Arg Pro Ser Arg Pro Arg Pro Arg Arg 100 105 110 Arg Arg Thr Arg Pro Ser Ser Ala Thr Arg Ser Arg Cys Ser Thr Arg

```
115
                           120
Thr Ala Thr Ala Gly Ser Pro Arg Arg Xaa Pro Arg Arg Ala Arg Arg
                       135
                                           140
Ala Arg Arg Arg Leu Leu Arg Arg Gly Leu Pro Pro His Asp Arg
                   150
                                       155
Pro Arg Arg Arg Trp Arg Arg Leu Arg Leu Pro Arg Leu Leu
               165
                                   170
Ala His Asp Asp Ala Gly Gly Val Ile Leu Ala Ser Ser Cys Leu Ala
           180
                               185
Gly Leu Cys Arg Ser Pro Arg Val Ser Ser Val Ala Lys Ser Leu Tyr
       195
                           200
Leu Tyr Val Asp Leu Phe Phe Arg Cys His Leu Leu Val Ser Ser Pro
                       215
Ser Cys Glu Met Asn Glu Pro Lys Arg Asp Leu Tyr Ile Phe Ile Phe
                   230
                                       235
Ser
```

- (2) INFORMATION FOR SEQ ID NO:3490:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 876 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..876
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577062
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3490:

tecaactetg egeegeaate cacteaagaa ggttageeet egtggteteg gatttggata 60 atectecgee gaggtatgaa acaggangeg gecaecagca tagtggtgae ecaggaggae 120 gtcctgcacc actacaagga gcctccaccc cgmcgcgagg acgatycgcc agcactggct 180 gcgtcgctgt cgttgccgtc gtcactgtcg gaggacaatg gcgacgccat gccgcagcca 240 tetteatacg eggtettgee gegeegggat ggegagetgg tgtetgegga ggagetgetg 300 ctgAgtgccg ccgctcaact tcgCccatgg tggaccacgg cgtgtaccgc tccggNattc 360 ccggacgcct ccaacttgcc gtttcttgag acgctccgac tccgctccgt cctgtgcctg 420 tgcccggagc catacccgga ggctaatctg gagttcctcc gtgcccacgg gatcaagctc 480 ttccagttcg gaatcgacgg ctccaaggaa ccatttgtga acataccaga agatagaatc 540 cgtgaagctc tagaagtcat cctagatgca agcaaccatc cggttcttat tcactgcaag 600 cgaggaaagc atcgaaccgg ctgtgtggtt ggatgcttta ggaaattgca acgctggtgt 660 ctaacttcaa tatttgacga ataccagcgt tttgctgctg ccaaaacaag agtttctgac 720 tacggttcat ggagctattt gatgtatcga gcataaagca tttagcattt gagtcgtctg 780 tatgatagta acattggtgc atgataacaa ctcaatactg gttccattac ggtgtcatct 840 ttttcattta agaaaaaaa tcatttctaa aaatgc

- (2) INFORMATION FOR SEQ ID NO:3491:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..128
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577063
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3491:
- Gln Leu Cys Ala Ala Ile His Ser Arg Arg Leu Ala Leu Val Val Ser

 1 10 15
- Asp Leu Asp Asn Pro Pro Pro Arg Tyr Glu Thr Gly Xaa Gly His Gln 20 25 30
- His Ser Gly Asp Pro Gly Gly Arg Pro Ala Pro Leu Gln Gly Ala Ser

(2) INFORMATION FOR SEQ ID NO:3492:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 226 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..226
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577064
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3492:

Met Lys Gln Xaa Ala Ala Thr Ser Ile Val Val Thr Gln Glu Asp Val 1 5 10 15

Leu His His Tyr Lys Glu Pro Pro Pro Xaa Arg Glu Asp Asp Xaa Pro 20 25 30

Ala Leu Ala Ala Ser Leu Ser Leu Pro Ser Ser Leu Ser Glu Asp Asn 35 40 45

Gly Asp Ala Met Pro Gln Pro Ser Ser Tyr Ala Val Leu Pro Arg Arg 50 55 60

Asp Gly Glu Leu Val Ser Ala Glu Glu Leu Leu Leu Ser Ala Ala Ala 65 70 75 80

Gln Leu Arg Pro Trp Trp Thr Thr Ala Cys Thr Ala Pro Xaa Phe Pro 85 90 95

Asp Ala Ser Asn Leu Pro Phe Leu Glu Thr Leu Arg Leu Arg Ser Val $100 \\ 0.05 \\ 105 \\ 110$

Leu Cys Leu Cys Pro Glu Pro Tyr Pro Glu Ala Asn Leu Glu Phe Leu 115 120 125

Arg Ala His Gly Ile Lys Leu Phe Gln Phe Gly Ile Asp Gly Ser Lys 130 135 140

Glu Pro Phe Val Asn Ile Pro Glu Asp Arg Ile Arg Glu Ala Leu Glu 145 150 155 160

Val Ile Leu Asp Ala Ser Asn His Pro Val Leu Ile His Cys Lys Arg \$165\$ \$170\$ \$175\$

Gly Lys His Arg Thr Gly Cys Val Val Gly Cys Phe Arg Lys Leu Gln \$180\$ \$185\$ \$190\$ Arg Trp Cys Leu Thr Ser Ile Phe Asp Glu Tyr Gln Arg Phe Ala Ala

195 200 205

Ala Lys Thr Arg Val Ser Asp Tyr Gly Ser Trp Ser Tyr Leu Met Tyr 210 215 220

Arg Ala

225

(2) INFORMATION FOR SEQ ID NO:3493:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

60

120

180

540

(ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..175 (D) OTHER INFORMATION: / Ceres Seq. ID 1577065 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3493: Met Pro Gln Pro Ser Ser Tyr Ala Val Leu Pro Arg Arg Asp Gly Glu 10 Leu Val Ser Ala Glu Glu Leu Leu Ser Ala Ala Ala Gln Leu Arg 25 Pro Trp Trp Thr Thr Ala Cys Thr Ala Pro Xaa Phe Pro Asp Ala Ser 40 Asn Leu Pro Phe Leu Glu Thr Leu Arg Leu Arg Ser Val Leu Cys Leu 55 60 Cys Pro Glu Pro Tyr Pro Glu Ala Asn Leu Glu Phe Leu Arg Ala His 75 70 Gly Ile Lys Leu Phe Gln Phe Gly Ile Asp Gly Ser Lys Glu Pro Phe 85 90 Val Asn Ile Pro Glu Asp Arg Ile Arg Glu Ala Leu Glu Val Ile Leu 100 105 110 Asp Ala Ser Asn His Pro Val Leu Ile His Cys Lys Arg Gly Lys His 115 120 125 Arg Thr Gly Cys Val Val Gly Cys Phe Arg Lys Leu Gln Arg Trp Cys 135 140 Leu Thr Ser Ile Phe Asp Glu Tyr Gln Arg Phe Ala Ala Ala Lys Thr 150 155 Arg Val Ser Asp Tyr Gly Ser Trp Ser Tyr Leu Met Tyr Arg Ala 165 170 (2) INFORMATION FOR SEQ ID NO:3494: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 630 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..630 (D) OTHER INFORMATION: / Ceres Seq. ID 1577073 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3494: aaaattaaag gaaaacggtg gactagaaac ttccaaatcg aacggcacac aaaaatcaca acceggaaag ggaccagcag egcaaaggtg agegagettt cetteggaac tetetegtge tcacctcAat ccgtccgaca gatccacacg aatcctctga ttcagagcag qqtqttqqca ttgatcagac gcctgccatg gctgatcagt tcgaggattc ggcgaacaat gtgatcattg aggaggtgaa caagggcctg aacccaggaa tggtggttct gcttgtggtt gcaagcttcc tgctgatctt ctttgtgggg aactatgcgc tgtatgtgta tgcgcagaag acgctcccgc caaagaagaa gaagccggtg tcgaagaaga agctgaagaa ggaaaagctg aagcaggggg tctctgcgcc gggagagtaa acggccatgc tgccgatcct cccgtccaga gctcctattc acatgattat tagagaaaaa aattatatat atataccaga tggagccgta gtgtDtggag

tAactttgtt ctgtagatgc tctgtcttta atggtacatc tgtattggag actttgagac

(2) INFORMATION FOR SEQ ID NO:3495:

cttgtttcag caactgatga atcttagccc

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..77

(D) OTHER INFORMATION: / Ceres Seq. ID 1577074 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3495: Lys Ile Lys Gly Lys Arg Trp Thr Arg Asn Phe Gln Ile Glu Arg His 10 Thr Lys Ile Thr Thr Arg Lys Gly Thr Ser Ser Ala Lys Val Ser Glu 2.0 25 30 Leu Ser Phe Gly Thr Leu Ser Cys Ser Pro Gln Ser Val Arg Gln Ile 40 His Thr Asn Pro Leu Ile Gln Ser Arg Val Leu Ala Leu Ile Arg Arg

55

Leu Pro Trp Leu Ile Ser Ser Arg Ile Arg Arg Thr Met 70

- (2) INFORMATION FOR SEQ ID NO:3496:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 80 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..80
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577075
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3496:

Met Ala Asp Gln Phe Glu Asp Ser Ala Asn Asn Val Ile Ile Glu Glu 5 10

Val Asn Lys Gly Leu Asn Pro Gly Met Val Val Leu Leu Val Val Ala 20 25

Ser Phe Leu Leu Ile Phe Phe Val Gly Asn Tyr Ala Leu Tyr Val Tyr 35 40

Ala Gln Lys Thr Leu Pro Pro Lys Lys Lys Pro Val Ser Lys Lys 55 60

Lys Leu Lys Lys Glu Lys Leu Lys Gln Gly Val Ser Ala Pro Gly Glu 70

- (2) INFORMATION FOR SEQ ID NO:3497:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 56 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..56
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577076
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3497:

Met Leu Pro Ile Leu Pro Ser Arg Ala Pro Ile His Met Ile Ile Arg 1.0

Glu Lys Asn Tyr Ile Tyr Ile Pro Asp Gly Ala Val Val Xaa Gly Val 2.0 25

Thr Leu Phe Cys Arg Cys Ser Val Phe Asn Gly Thr Ser Val Leu Glu 40

Thr Leu Arg Pro Cys Phe Ser Asn

- (2) INFORMATION FOR SEQ ID NO:3498:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 885 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..885
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577089
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3498:

atccgagtcc acccaactaa tcacgcccaa tcagaacaga ctcggtcgct tcaccactcc 60 actogocgca ggogocgggo gccgccgagg ggatcggago aagatgttot tocacatogt 120 getggagegg aacatgeage tgeacceacg acaetteggg eegeacetee gegacaaget 180 egtttecaag eteateaagg aegtegaggg caeetgeage gggeggeaeg ggttegttgt 240 ggcgatcacg ggtgtggagg acatcggcaa ggggctcatc cqqqaaqqca cqqqatacqt 300 caccttcccc gycaagtacc agtgcgttgt ctttagaccc ttcaagggcg agatcctcga 360 agctgtcgtc accatggtga acaagatggg cttctttgcg gaggctgggc cgqtgcaqat 420 cttcgtgtcc aaccatttga ttccagacga tatggagttc caatcaRgga gatgtgccga 480 actacacaac ttctgatgga tcggtgaaaa ttcaaaaaaga gagtgaggtg cggctgaaga 540 ttattGggta ctcgtgtcga tgctacagaa attttttgca ttggcacAat Aaaaggatga 600 ttttctgggt gktatcagcg atcctggtgc gscagtgtaa atggtctaag aaqcgagatt 660 gtactccatt gttctgactt ctgagtacta tcgcagacgt gtgtaatcgc tggtccgtta 720 aaactgcaat ggctgtactg actgcggaac ttgttgagaa tgatgtgact aggaccttgt 780 ttagggcctg tttggttctt tagtatggcc ctgattggca caactgctgt ttattgaaaa 840 aacagcttat ctgataagct ggtgaaaaat agcttctgct tgttg

- (2) INFORMATION FOR SEQ ID NO:3499:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 164 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..164
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577090
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3499:

Ser Glu Ser Thr Gln Leu Ile Thr Pro Asn Gln Asn Arg Leu Gly Arg 1 5 10 15 Phe Thr Thr Pro Leu Ala Ala Gly Ala Gly Arg Arg Arg Gly Asp Arg

20 25 30 Sor Lys Mot Pho Pho His Ilo Val Law Cly Arg Acr Met Cly Law His

Ser Lys Met Phe Phe His Ile Val Leu Glu Arg Asn Met Gln Leu His $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Pro Arg His Phe Gly Pro His Leu Arg Asp Lys Leu Val Ser Lys Leu 50 55 60

Ile Lys Asp Val Glu Gly Thr Cys Ser Gly Arg His Gly Phe Val Val 65 70 75 80

Ala Ile Thr Gly Val Glu Asp Ile Gly Lys Gly Leu Ile Arg Glu Gly 85 90 95

Thr Gly Tyr Val Thr Phe Pro Xaa Lys Tyr Gln Cys Val Val Phe Arg 100 105 110

Pro Phe Lys Gly Glu Ile Leu Glu Ala Val Val Thr Met Val As
n Lys 115 120 125

Met Gly Phe Phe Ala Glu Ala Gly Pro Val Gln Ile Phe Val Ser Asn 130 135 140

His Leu Ile Pro Asp Asp Met Glu Phe Gln Ser Xaa Arg Cys Ala Glu 145 150 155 160

Leu His Asn Phe

- (2) INFORMATION FOR SEQ ID NO:3500:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 130 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

(D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..130 (D) OTHER INFORMATION: / Ceres Seq. ID 1577091 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3500: Met Phe Phe His Ile Val Leu Glu Arg Asn Met Gln Leu His Pro Arg 5 10 His Phe Gly Pro His Leu Arg Asp Lys Leu Val Ser Lys Leu Ile Lys 25 Asp Val Glu Gly Thr Cys Ser Gly Arg His Gly Phe Val Val Ala Ile 40 4.5 Thr Gly Val Glu Asp Ile Gly Lys Gly Leu Ile Arg Glu Gly Thr Gly 55 Tyr Val Thr Phe Pro Xaa Lys Tyr Gln Cys Val Val Phe Arg Pro Phe 70 75 Lys Gly Glu Ile Leu Glu Ala Val Val Thr Met Val Asn Lys Met Gly 85 90 95 Phe Phe Ala Glu Ala Gly Pro Val Gln Ile Phe Val Ser Asn His Leu 100 105 Ile Pro Asp Asp Met Glu Phe Gln Ser Xaa Arg Cys Ala Glu Leu His 120 Asn Phe 130 (2) INFORMATION FOR SEQ ID NO:3501: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 120 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..120 (D) OTHER INFORMATION: / Ceres Seq. ID 1577092 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3501: Met Gln Leu His Pro Arg His Phe Gly Pro His Leu Arg Asp Lys Leu 10 Val Ser Lys Leu Ile Lys Asp Val Glu Gly Thr Cys Ser Gly Arg His 2.5 Gly Phe Val Val Ala Ile Thr Gly Val Glu Asp Ile Gly Lys Gly Leu 40 Ile Arg Glu Gly Thr Gly Tyr Val Thr Phe Pro Xaa Lys Tyr Gln Cys 55 Val Val Phe Arg Pro Phe Lys Gly Glu Ile Leu Glu Ala Val Val Thr 70 75 Met Val Asn Lys Met Gly Phe Phe Ala Glu Ala Gly Pro Val Gln Ile 85 90 Phe Val Ser Asn His Leu Ile Pro Asp Asp Met Glu Phe Gln Ser Xaa 100 105 Arg Cys Ala Glu Leu His Asn Phe 115 (2) INFORMATION FOR SEQ ID NO:3502: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 776 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single

(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: DNA (genomic)

(ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..776
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577122
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3502:

gggcaactcg aagaagccgc gtgcgttatc ctttgagcag tttgggcgct gagcaagtcc 60 agtgagarar ggagarcggc gagaggatgg ctgggatggc atcgctgcag ggcgccatGg 120 cgtcgctctc catctccGcg ctaggcgcgg cgacggcgag cagcagcagc ttctggggca 180 accggetege cacetactee gegeegeage etggggtaag gtttatggte aagatatgee 240 caattgaaat gagacttaag agatgggagc gaaagaagtg taaaccaaac agtcttcctg 300 tgctgcacaa gatgcatgtt aggatcgggg acacggtaca ggttattgca ggccqtgaga 360 aaggaaaggt tggagaagtc acacgccttt tcaagcacaa cagcacggtg atcgtgaagg 420 acctgaactt gaagtcgaag cacaagaaag gcacagacga tgaacccqqt gaaatcqtca 480 tgattgaagg ccccattcat agctcaaatg tgatgctcta ctctaaggag aagagtgtgg 540 taagcagggt tggccacaaa ttcctggagg acgggaccaa ggtccgatac ctggtcaaga 600 ccggtgaagt aatcgacagt gttgagaagt gggtaaaggt ttttaaggaa ggaaattcgg 660 agtaacagtt ttagcatgaa aacctgcaaa atgctctgaa cgctrmtqcq tcttqcatqt 720 tgaattgagc ctgtttatcc ctctatgttg ttatttacgc cagtttttcc ccctgt

- (2) INFORMATION FOR SEQ ID NO:3503:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 192 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..192
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577123
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3503:

Met Ala Gly Met Ala Ser Leu Gln Gly Ala Met Ala Ser Leu Ser Ile 1 10 15 Ser Ala Leu Gly Ala Ala Thr Ala Ser Ser Ser Ser De Tro Cly Arm

Ser Ala Leu Gly Ala Ala Thr Ala Ser Ser Ser Ser Phe Trp Gly Asn 20 25 30

Arg Leu Ala Thr Tyr Ser Ala Pro Gln Pro Gly Val Arg Phe Met Val 35 40 45

Lys Ile Cys Pro Ile Glu Met Arg Leu Lys Arg Trp Glu Arg Lys Lys 50 55 60

Cys Lys Pro Asn Ser Leu Pro Val Leu His Lys Met His Val Arg Ile 65 70 75 80

Gly Asp Thr Val Gln Val Ile Ala Gly Arg Glu Lys Gly Lys Val Gly 85 90 95

Glu Val Thr Arg Leu Phe Lys His Asn Ser Thr Val Ile Val Lys Asp 100 105 110

Leu Asn Leu Lys Ser Lys His Lys Lys Gly Thr Asp Asp Glu Pro Gly 115 120 125

Glu Ile Val Met Ile Glu Gly Pro Ile His Ser Ser Asn Val Met Leu 130 135 140

Tyr Ser Lys Glu Lys Ser Val Val Ser Arg Val Gly His Lys Phe Leu 145 150 155 160

Glu Asp Gly Thr Lys Val Arg Tyr Leu Val Lys Thr Gly Glu Val Ile $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$

Asp Ser Val Glu Lys Trp Val Lys Val Phe Lys Glu Gly Asn Ser Glu
180 185 190

- (2) INFORMATION FOR SEQ ID NO:3504:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 189 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..189
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577124
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3504:
- Met Ala Ser Leu Gln Gly Ala Met Ala Ser Leu Ser Ile Ser Ala Leu 1 5 10 15
- Gly Ala Ala Thr Ala Ser Ser Ser Ser Phe Trp Gly Asn Arg Leu Ala 20 25 30
- Thr Tyr Ser Ala Pro Gln Pro Gly Val Arg Phe Met Val Lys Ile Cys 35 40 45
- Pro Ile Glu Met Arg Leu Lys Arg Trp Glu Arg Lys Lys Cys Lys Pro
 50 55 60
- Asn Ser Leu Pro Val Leu His Lys Met His Val Arg Ile Gly Asp Thr 65 70 75 80
- Val Gln Val Ile Ala Gly Arg Glu Lys Gly Lys Val Gly Glu Val Thr
 85 90 95
- Arg Leu Phe Lys His Asn Ser Thr Val Ile Val Lys Asp Leu Asn Leu 100 105 110
- Lys Ser Lys His Lys Lys Gly Thr Asp Asp Glu Pro Gly Glu Ile Val 115 120 125
- Met Ile Glu Gly Pro Ile His Ser Ser Asn Val Met Leu Tyr Ser Lys 130 135 140
- Glu Lys Ser Val Val Ser Arg Val Gly His Lys Phe Leu Glu Asp Gly 145 150 155 160
- Thr Lys Val Arg Tyr Leu Val Lys Thr Gly Glu Val Ile Asp Ser Val 165 170 175
- Glu Lys Trp Val Lys Val Phe Lys Glu Gly Asn Ser Glu 180
- (2) INFORMATION FOR SEQ ID NO:3505:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 182 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..182
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577125
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3505:
- Met Ala Ser Leu Ser Ile Ser Ala Leu Gly Ala Ala Thr Ala Ser Ser $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$
- Ser Ser Phe Trp Gly Asn Arg Leu Ala Thr Tyr Ser Ala Pro Gln Pro 20 25 30
- Gly Val Arg Phe Met Val Lys Ile Cys Pro Ile Glu Met Arg Leu Lys 35 40 45
- Arg Trp Glu Arg Lys Lys Cys Lys Pro Asn Ser Leu Pro Val Leu His 50 55 60
- Lys Met His Val Arg Ile Gly Asp Thr Val Gln Val Ile Ala Gly Arg 75 80
- Glu Lys Gly Lys Val Gly Glu Val Thr Arg Leu Phe Lys His Asn Ser 85 90 95
- Thr Val Ile Val Lys Asp Leu Asn Leu Lys Ser Lys His Lys Gly
 100 105 110
- Thr Asp Asp Glu Pro Gly Glu Ile Val Met Ile Glu Gly Pro Ile His
 115 120 125
- Ser Ser Asn Val Met Leu Tyr Ser Lys Glu Lys Ser Val Val Ser Arg 130 135 140 Val Gly His Lys Phe Leu Glu Asp Gly Thr Lys Val Arg Tyr Leu Val

145 150 155 Lys Thr Gly Glu Val Ile Asp Ser Val Glu Lys Trp Val Lys Val Phe 165 170 Lys Glu Gly Asn Ser Glu

180

- (2) INFORMATION FOR SEQ ID NO:3506:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 814 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..814
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577130
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3506:

agtgtaaacc agcccaccct cctccccgtc tcctctccct ccccatgcgc tgttttgttc 60 tgtattgggt tgtgcgcggg ggacaggacg cctcctgcgc cgaccgttcc qttcqtqttt 120 gtgcctgcct gtgccttcgg ttgttcctct gagcgacggc gagtcggcga ccgaggggga 180 ccacagacgc attagctggg tgaactcttt caaaaggggc aggtgcgcta qtttqaatqq 240 ctgctacaaa gcttcaggcc ttttggaacc accctgctgg ccccaaaacc attcatttct 300 gggcgccaac attcaaatgg ggtatcagca ttgccaacat agccgacttt gcaaagccgc ctgaaaagat atcttaccct cagcaagttg ctgttgcatg cactggaatc atttggtcaa ggtacagctt ggttatcaca ccgaaaaact ggaacctttt cagtgttaac gttgcaatgg cgggtacagg cctgtatcag ctttcacgga agattagsca agattacNtt gtctggtgag 540 aaggatgNct gNctccacaa ctgNcaagaa tagataatga caacacacaa agaataactg attgagaagt ctgncggcct agggatctta ctcttgattt ttctgggnca ggncaaggat atgtctcgat ccaggacggg tcatgtttgt tttcttgttc ttctgaaatc atgagncagg 720 ttaatgtgaa aatctcctgc caaaaaaaga agcccatgaa gtaatatttt gtgcattttt 780 gtgggaaaaa agtcatgncc aggacatgat tcgt

- (2) INFORMATION FOR SEQ ID NO:3507:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 64 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..64
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577131
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3507:

Ser Val Asn Gln Pro Thr Leu Leu Pro Val Ser Ser Pro Ser Pro Cys 10

Ala Val Leu Phe Cys Ile Gly Leu Cys Ala Gly Asp Arg Thr Pro Pro 2.0 25

Ala Pro Thr Val Pro Phe Val Phe Val Pro Ala Cys Ala Phe Gly Cys 40 45

Ser Ser Glu Arg Arg Arg Val Gly Asp Arg Gly Gly Pro Gln Thr His

- (2) INFORMATION FOR SEO ID NO:3508:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

- (A) NAME/KEY: peptide (B) LOCATION: 1..100
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577132
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3508:

Met Ala Ala Thr Lys Leu Gln Ala Phe Trp Asn His Pro Ala Gly Pro 1 5 10 15

Lys Thr Ile His Phe Trp Ala Pro Thr Phe Lys Trp Gly Ile Ser Ile 20 25 30

Ala Asn Ile Ala Asp Phe Ala Lys Pro Pro Glu Lys Ile Ser Tyr Pro 35 40 45

Gln Gln Val Ala Val Ala Cys Thr Gly Ile Ile Trp Ser Arg Tyr Ser 50 55 60

Leu Val Ile Thr Pro Lys Asn Trp Asn Leu Phe Ser Val Asn Val Ala 65 70 75 80
Met Ala Gly Thr Gly Leu Tyr Gln Leu Ser Arg Lys Ile Xaa Gln Asp

set Ald Gly Inc Gly Led Tyr Gln Led Ser Arg Lys lie Xaa Gin A 85 90 95

Tyr Xaa Val Trp 100

- (2) INFORMATION FOR SEQ ID NO:3509:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 764 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..764
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577133
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3509:

gaaatacccg ccgctacagc ctactgctgg acatctaagg gcccacctga aaaaaccctt gegeegetga getgagteee etteeettet etegtegeet eegeeteege etteagttta 120 gcctccaagc aggggcgccg cgcggggtat tctgtccgtc gttgaggata gagagtcact 180 tgcaccgggg gagcggagat gaagccggtt gtggggatcg tggtgtcgaa caagatgcag 240 aagtcggtgg tggttgcatt ggaccgcctc ttccacaacC Aaaggtatac Aaaccgctac 300 gtcaagegca cHctCccaag ttcatggcac acgacgatga caacacctgc aacattggcg 360 aCccgggtta ggctggatcc Tttctaggcc cttgagcaga cacaagcact gggttgttgc 420 tgaaattctc cgcagagcta aggtgtacgt tccaccagct gcaacagcgt ccagtgaacg 480 tggtagcaaa tctcaacaag ctggtggtgc taccaaatga tccatctgaa gttactcaga 540 acaagatgca gtcacggctt gtttttcttt cgctgtatgt ttgtttcctt gtggaatgtg 600 gttgccatgt ttagcatggg agaaaaaata gcaagcagcc agcatctttg cttaattact 660 gttgttcttc tgtggtgtcc ttcgtttaac ggtactagcc attaaggatg tagttaccag 720 attcaacaag accaatggat tcatattgta ttggttcact tccq

- (2) INFORMATION FOR SEQ ID NO:3510:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 62 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..62
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577134
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3510:
- Met Lys Pro Val Val Gly Ile Val Val Ser Asn Lys Met Gln Lys Ser 1 5 10 15
- Val Val Val Ala Leu Asp Arg Leu Phe His Asn Gln Arg Tyr Thr Asn
 20 25 30
- Arg Tyr Val Lys Arg Xaa Leu Pro Ser Ser Trp His Thr Thr Met Thr 35 40 45

```
Thr Pro Ala Thr Leu Ala Thr Arg Val Arg Leu Asp Pro Phe
                         55
(2) INFORMATION FOR SEQ ID NO:3511:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 50 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..50
          (D) OTHER INFORMATION: / Ceres Seq. ID 1577135
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3511:
Met Gln Lys Ser Val Val Val Ala Leu Asp Arg Leu Phe His Asn Gln
                                    10
Arg Tyr Thr Asn Arg Tyr Val Lys Arg Xaa Leu Pro Ser Ser Trp His
            20
                                25
Thr Thr Met Thr Thr Pro Ala Thr Leu Ala Thr Arg Val Arg Leu Asp
                            40
Pro Phe
    50
(2) INFORMATION FOR SEQ ID NO:3512:
    (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 62 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..62
          (D) OTHER INFORMATION: / Ceres Seq. ID 1577136
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3512:
Met Ile His Leu Lys Leu Leu Arg Thr Arg Cys Ser His Gly Leu Phe
                5
                                    10
Phe Phe Arg Cys Met Phe Val Ser Leu Trp Asn Val Val Ala Met Phe
            2.0
                                25
                                                     30
Ser Met Gly Glu Lys Ile Ala Ser Ser Gln His Leu Cys Leu Ile Thr
                            40
Val Val Leu Leu Trp Cys Pro Ser Phe Asn Gly Thr Ser His
                       55
(2) INFORMATION FOR SEQ ID NO:3513:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 698 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..698
          (D) OTHER INFORMATION: / Ceres Seq. ID 1577137
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3513:
tgcatatatg tccggcggtt aattcatttt gctagcttct cctaacgata cgccgqtggt
                                                                        60
tottaattca atgogtttat acqtqtaqct qqaqaaqctq qccqaqatqc tqcacqaqcc
                                                                       120
geogeaggge aagtactaeg geggeaatge ggacgacgtg egetegggeg gegteggegg
                                                                       180
cacgaaggag gaggaggagt Cccacagacg cctgcgccgg ggccgcgctc tactcgtccg
                                                                       240
agtgcgctgg cggtggcagg ttcatcgcgc acttcttggc ggacgacgac gtgggagcag
                                                                       300
ccctcttccg gccgccgtcg tctccgcagc cgaccgctgg cttactcacg tcgtcggggc
                                                                       360
cgccggagca ccagccgttc cagttccact ccggctactg ctggccgtcg tcgtcgqcgq
                                                                       420
```

aGcagacetg cageggeteg caatggtggg agttegagte ceteagegag tgaegtaega 480 tgateacaag eggeegggg teacteggtt ceaageacae gtaagggeeg ggeeaataeg 540 agttegtteg tageggtete gteactegte agetageeet geagageaae ggtgtatgea 600 tagetteagt agategaagt ceaggteeag gaetgeeeat eaageagttt ettetteeg eategatea tegateatge atgeaaaaga tttttttt

- (2) INFORMATION FOR SEQ ID NO:3514:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 148 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..148
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577138
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3514:

Met Leu His Glu Pro Pro Gln Gly Lys Tyr Tyr Gly Gly Asn Ala Asp

1 10 15

Asp Val Arg Ser Gly Gly Val Gly Gly Thr Lys Glu Glu Glu Ser 20 25 30

His Arg Arg Leu Arg Arg Gly Arg Ala Leu Leu Val Arg Val Arg Trp
35 40 45

Arg Trp Gln Val His Arg Ala Leu Leu Gly Gly Arg Arg Gly Ser
50 60

Ser Pro Leu Pro Ala Ala Val Val Ser Ala Ala Asp Arg Trp Leu Thr 65 70 75 80

His Val Val Gly Ala Ala Gly Ala Pro Ala Val Pro Val Pro Leu Arg 85 90 95

Leu Leu Ala Val Val Gly Gly Ala Asp Leu Gl
n Arg Leu Ala 100 105 110

Met Val Gly Val Arg Val Pro Gln Arg Val Thr Tyr Asp Asp His Lys 115 120 125

Arg Pro Gly Val Thr Arg Phe Gln Ala His Val Arg Ala Gly Pro Ile 130 135 140

Arg Val Arg Ser

145

- (2) INFORMATION FOR SEQ ID NO:3515:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..108
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577139
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3515:

Met Arg Thr Thr Cys Ala Arg Ala Ala Ser Ala Ala Arg Arg Arg 1 5 10 15

Arg Ser Pro Thr Asp Ala Cys Ala Gly Ala Ala Leu Tyr Ser Ser Glu
20 25 30

Cys Ala Gly Gly Arg Phe Ile Ala His Phe Leu Ala Asp Asp Asp 35 40 45

Val Gly Ala Ala Leu Phe Arg Pro Pro Ser Ser Pro Gln Pro Thr Ala 50 55 60

Gly Leu Leu Thr Ser Ser Gly Pro Pro Glu His Gln Pro Phe Gln Phe 65 70 75 80

His Ser Gly Tyr Cys Trp Pro Ser Ser Ser Ala Glu Gln Thr Cys Ser

```
Gly Ser Gln Trp Trp Glu Phe Glu Ser Leu Ser Glu 100 105
```

- (2) INFORMATION FOR SEQ ID NO:3516:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 570 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..570
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577146
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3516:

aaagaattag tgggagtgca aactgaagtt gtgtatgaga aatgcccaac cgaagctatg 60 attgaaactg gggggttttc ctatgcggtg gtggttgttg gagaggttcc atatgccgaa 120 ttgacaggag atagaactga ccttagtatt ccgtttaatg gctctgacct tatcatccgt 180 gttgcaagta aaatccctac cctagtgatt gttatatctg gaaggccatt aattattgag 240 tcacaagttt tggaaaagat agaagctcta gtcgctgcct ggctgcctgg aagtgagggc 300 atgggaatta ccgattgcct ctttggagat catgattttg tgggcacatt gcctgtgaca tggtgtaagt ctgttgatca attgcctata gatgctggag actctaacta tgacccgcta 420 ttccctgttg gatatgggct aaaaatgttt cgaagcgata atgattcaac ataactttat 480 tatttattgg gtacatttga atctttgtga tgttaaatac tctgtattta ttggctattg 540 gGaacttaaa atgaaataat atattgttgt

- (2) INFORMATION FOR SEQ ID NO:3517:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 157 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..157
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577147
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3517:

Lys Glu Leu Val Gly Val Gln Thr Glu Val Val Tyr Glu Lys Cys Pro 1 5 10 15

Thr Glu Ala Met Ile Glu Thr Gly Gly Phe Ser Tyr Ala Val Val Val 20 25 30

Val Gly Glu Val Pro Tyr Ala Glu Leu Thr Gly Asp Arg Thr Asp Leu 35 40 45

Ser Ile Pro Phe Asn Gly Ser Asp Leu Ile Ile Arg Val Ala Ser Lys 50 55 60

Ile Pro Thr Leu Val Ile Val Ile Ser Gly Arg Pro Leu Ile Ile Glu 65 70 75 80

Ser Gln Val Leu Glu Lys Ile Glu Ala Leu Val Ala Ala Trp Leu Pro 85 90 95

Gly Ser Glu Gly Met Gly Ile Thr Asp Cys Leu Phe Gly Asp His Asp 100 105 110

Phe Val Gly Thr Leu Pro Val Thr Trp Cys Lys Ser Val Asp Gln Leu 115 120 125

Pro Ile Asp Ala Gly Asp Ser Asn Tyr Asp Pro Leu Phe Pro Val Gly 130 135

Tyr Gly Leu Lys Met Phe Arg Ser Asp Asn Asp Ser Thr 145 150 155

- (2) INFORMATION FOR SEQ ID NO:3518:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 138 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..138
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577148
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3518:
- Met Ile Glu Thr Gly Gly Phe Ser Tyr Ala Val Val Val Val Gly Glu $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$
- Val Pro Tyr Ala Glu Leu Thr Gly Asp Arg Thr Asp Leu Ser Ile Pro 20 25 30
- Phe Asn Gly Ser Asp Leu Ile Ile Arg Val Ala Ser Lys Ile Pro Thr 35 40 45
- Leu Val Ile Val Ile Ser Gly Arg Pro Leu Ile Ile Glu Ser Gln Val 50 55 60
- Leu Glu Lys Ile Glu Ala Leu Val Ala Ala Trp Leu Pro Gly Ser Glu 65 70 75 80
- Gly Met Gly Ile Thr Asp Cys Leu Phe Gly Asp His Asp Phe Val Gly 85 90 95
- Thr Leu Pro Val Thr Trp Cys Lys Ser Val Asp Gln Leu Pro Ile Asp 100 105 110
- Ala Gly Asp Ser Asn Tyr Asp Pro Leu Phe Pro Val Gly Tyr Gly Leu 115 120 125
- Lys Met Phe Arg Ser Asp Asn Asp Ser Thr 130 135
- (2) INFORMATION FOR SEQ ID NO:3519:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1047 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1047
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577163
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3519:

() E							
	agccacaccc	ggacacccca	cacaggcacg	aggcaaccag	ccacgcgagc	ggcgaaactg	60
	cgggagccaa	tcagaaccta	cagcgatgca	atgatcgccg	tcgcatcgtc	cttcccctcg	120
			cggctcgggg				180
	cgtccctccg	ccacccgcgc	gtctcggcgc	tcggtggagg	cctcgaagga	gagccgggga	240
	agatactgga	tccgcgcgcc	acgccgttcc	agatcctcgg	cctcgacgcc	gccgccggct	300
	actccgccgc	cgaactcaag	gccgcttttc	gcgcccgggt	taaggaattc	catcctgatg	360
	tttgcaagga	cccagaaaat	gcagatttaa	taatgaggcg	agtgatcgag	gcctatcaga	420
	tgttatctgg	caaccaagaa	atgatgtttg	aaaggaacaa	tgttgaccca	tttgatgaac	480
	ctgagtgtga	agctcgtgac	atatttgtca	atgaacttct	atgcattggc	actggatgtc	540
	catattcttg	tgttaaaagg	gcaCctcatg	tattttcatt	ttcagatgat	actggtacag	600
	ctcgtgcaat	atctcaaggt	aatggagaag	atgatcttgt	tcagctcgct	gttgggcagt	660
	gtccaagaaa	gtgcatatac	tatgtgacgc	cttgccaaca	cactattttg	gaggatgttc	720
	ttgctagtgt	gttgatggtg	ccttacgatc	ttgctgaagc	agcagttctg	gattccctcc	780
	tttcaaaagc	gaagttcgag	aataacaggt	ataagaagcc	ccaaagagga	gcaaaatcat	840
	cctccgatta	tgttgattgg	atgtgatctg	atcccgagac	acaaagagga	tgccagattc	900
	agccgaaggc	agttcggtag	atttatgctg	gtttgcctat	tctccttggt	cagttgcccg	960
	atagtttata	aaatggaata	cgtttacgtg	gacagactgc	tttgtttgtg	gtatacggtt	1020
	atgatttcta	taatatttct	ttctgcc				

- (2) INFORMATION FOR SEQ ID NO:3520:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 287 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..287
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577164
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3520:
- Pro His Pro Asp Thr Pro His Arg His Glu Ala Thr Ser His Ala Ser 1 5 10 15
- Gly Glu Thr Ala Gly Ala Asn Gln Asn Leu Gln Arg Cys Asn Asp Arg
 20 25 30
- Arg Arg Ile Val Leu Pro Leu Ala Arg Pro Arg Gly Ser Val Arg Leu 35 40
- Gly Asp Thr Ala Thr Ala Val Tyr Ala Ala Xaa Thr Ser Leu Arg His
 50 55 60
- Pro Arg Val Ser Ala Leu Gly Gly Gly Leu Glu Gly Glu Pro Gly Lys
 65 70 75 80
- Ile Leu Asp Pro Arg Ala Thr Pro Phe Gln Ile Leu Gly Leu Asp Ala 85 90 95
- Ala Ala Gly Tyr Ser Ala Ala Glu Leu Lys Ala Ala Phe Arg Ala Arg
 100 105 110
- Val Lys Glu Phe His Pro Asp Val Cys Lys Asp Pro Glu Asn Ala Asp 115 120 125
- 115 120 125 Leu Ile Met Arg Arg Val Ile Glu Ala Tyr Gln Met Leu Ser Gly Asn
- 130 135 140
 Gln Glu Met Met Phe Glu Arg Asn Asn Val Asp Pro Phe Asp Glu Pro
- 145 150 155 160
 Glu Cys Glu Ala Arg Asp Ile Phe Val Asn Glu Leu Leu Cys Ile Gly
 165 170 175
- Thr Gly Cys Pro Tyr Ser Cys Val Lys Arg Ala Pro His Val Phe Ser 180 185 190
- Phe Ser Asp Asp Thr Gly Thr Ala Arg Ala Ile Ser Gln Gly Asn Gly 195 200 205
- Glu Asp Asp Leu Val Gln Leu Ala Val Gly Gln Cys Pro Arg Lys Cys 210 215 220
- Ile Tyr Tyr Val Thr Pro Cys Gln His Thr Ile Leu Glu Asp Val Leu 225 230 235 240
- Ala Ser Val Leu Met Val Pro Tyr Asp Leu Ala Glu Ala Ala Val Leu 245 250 255
- Asp Ser Leu Leu Ser Lys Ala Lys Phe Glu Asn Asn Arg Tyr Lys Lys 260 265 270
- Pro Gln Arg Gly Ala Lys Ser Ser Ser Asp Tyr Val Asp Trp Met 275 280 285
- (2) INFORMATION FOR SEQ ID NO:3521:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 157 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..157
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577165
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3521:
- Met Arg Arg Val Ile Glu Ala Tyr Gln Met Leu Ser Gly Asn Gln Glu 1 5 10 15
- Met Met Phe Glu Arg Asn Asn Val Asp Pro Phe Asp Glu Pro Glu Cys
 20 25 30
- Glu Ala Arg Asp Ile Phe Val Asn Glu Leu Leu Cys Ile Gly Thr Gly 35 40 45
- Cys Pro Tyr Ser Cys Val Lys Arg Ala Pro His Val Phe Ser Phe Ser

180

```
50
                       55
Asp Asp Thr Gly Thr Ala Arg Ala Ile Ser Gln Gly Asn Gly Glu Asp
                   70
                                      75
Asp Leu Val Gln Leu Ala Val Gly Gln Cys Pro Arg Lys Cys Ile Tyr
                                  90
Tyr Val Thr Pro Cys Gln His Thr Ile Leu Glu Asp Val Leu Ala Ser
          100
                             105
Val Leu Met Val Pro Tyr Asp Leu Ala Glu Ala Ala Val Leu Asp Ser
       115
                         120
                                            125
Leu Leu Ser Lys Ala Lys Phe Glu Asn Asn Arg Tyr Lys Lys Pro Gln
        135
Arg Gly Ala Lys Ser Ser Ser Asp Tyr Val Asp Trp Met
       150
145
(2) INFORMATION FOR SEQ ID NO:3522:
    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 148 amino acids
         (B) TYPE: amino acid
         (C) STRANDEDNESS:
         (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
         (A) NAME/KEY: peptide
         (B) LOCATION: 1..148
         (D) OTHER INFORMATION: / Ceres Seq. ID 1577166
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3522:
Met Leu Ser Gly Asn Gln Glu Met Met Phe Glu Arg Asn Asn Val Asp
                                 10
Pro Phe Asp Glu Pro Glu Cys Glu Ala Arg Asp Ile Phe Val Asn Glu
   20
                             25
Leu Leu Cys Ile Gly Thr Gly Cys Pro Tyr Ser Cys Val Lys Arg Ala
                          40
Pro His Val Phe Ser Phe Ser Asp Asp Thr Gly Thr Ala Arg Ala Ile
                      55
Ser Gln Gly Asn Gly Glu Asp Asp Leu Val Gln Leu Ala Val Gly Gln
                  70
                                     75
Cys Pro Arg Lys Cys Ile Tyr Tyr Val Thr Pro Cys Gln His Thr Ile
             85
                                 90
Leu Glu Asp Val Leu Ala Ser Val Leu Met Val Pro Tyr Asp Leu Ala
          100 105
Glu Ala Ala Val Leu Asp Ser Leu Leu Ser Lys Ala Lys Phe Glu Asn
      115 120
                                            125
Asn Arg Tyr Lys Lys Pro Gln Arg Gly Ala Lys Ser Ser Ser Asp Tyr
  130
                      135
Val Asp Trp Met
145
(2) INFORMATION FOR SEQ ID NO:3523:
    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 832 base pairs
         (B) TYPE: nucleic acid
         (C) STRANDEDNESS: single
         (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
         (A) NAME/KEY: -
         (B) LOCATION: 1..832
         (D) OTHER INFORMATION: / Ceres Seq. ID 1577167
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3523:
attttegtea eccetgaege tegaegeete teeteetete edeceeeace egteeatege
```

cectecetee ggtetgeget cecacageet caeceetgeg ceceegeega ttegegtege cetttgttgg aaggaacgat ggageagaee tteateatga teaageeega eggegteeag

cggggcctga tcggggacat catcagtcgc ttcgagaaga aagggttcta cctcaagggg

atgaagttca tgaacgtgga gaggtccttc gcgcagCCag cactacgctg acctttccga 300 caageettte ttYCccccgg gttggtggag tacateattt ccggccccqt ggtggcgatg 360 gtgtgggagg ggaaggacgt cgtgttgact ggccgcaGga tcattggggc caccaqqcct 420 tgggaggcag cccccggtac cattcgtggg gactacgccg tggaagtcgg caggaatgtc 480 atccatggaa gcgactccgt ggagaacggg aagaaggaga tcgctctctg gttccctgaa 540 ggtgtggcac agtggaagag caacetteat ecetggatet acgaggettg agcagttgag 600 cttggatgcc ttgcctgctc catggaaacc agagttttgt ttgagtatta tctgttggct 660 ctggctgaag agtcataatt tagcgctctg tgtgttacac cagagttaag tctgcctgaa 720 cttatgtggc atttgtttga gtttctgcct tcgtgccctg ttttctaatg taccgtggtt 780 gtgaaccggt caatgtgatc tgaaataaaa cattgcgtgc caagtttgtg tc

- (2) INFORMATION FOR SEQ ID NO:3524:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 96 amino acids(B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..96
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577168
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3524:

Ile Phe Val Thr Pro Asp Ala Arg Arg Leu Ser Ser Ser Xaa Pro Pro 1 5 10 15

Pro Val His Arg Pro Ser Leu Arg Ser Ala Leu Pro Gln Pro His Pro 20 25 30

Cys Ala Pro Ala Asp Ser Arg Arg Pro Leu Leu Glu Gly Thr Met Glu 35 40 45

Gln Thr Phe Ile Met Ile Lys Pro Asp Gly Val Gln Arg Gly Leu Ile
50 55 60

Gly Asp Ile Ile Ser Arg Phe Glu Lys Lys Gly Phe Tyr Leu Lys Gly 65 70 75 80

Met Lys Phe Met Asn Val Glu Arg Ser Phe Ala Gln Pro Ala Leu Arg 85 90 95

- (2) INFORMATION FOR SEQ ID NO:3525:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..77
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577169
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3525:

Met Val Trp Glu Gly Lys Asp Val Val Leu Thr Gly Arg Arg Ile Ile 1 5 10 15

Gly Ala Thr Arg Pro Trp Glu Ala Ala Pro Gly Thr Ile Arg Gly Asp 20 25 30

Tyr Ala Val Glu Val Gly Arg Asn Val Ile His Gly Ser Asp Ser Val 35 40 45

Glu Asn Gly Lys Lys Glu Ile Ala Leu Trp Phe Pro Glu Gly Val Ala 50 60

Gln Trp Lys Ser Asn Leu His Pro Trp Ile Tyr Glu Ala 65 70 75

- (2) INFORMATION FOR SEQ ID NO:3526:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..77
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577170
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3526:

Met Ser Ser Met Glu Ala Thr Pro Trp Arg Thr Gly Arg Arg Ser

1 10 15

Leu Ser Gly Ser Leu Lys Val Trp His Ser Gly Arg Ala Thr Phe Ile 20 25 30

Pro Gly Ser Thr Arg Leu Glu Gln Leu Ser Leu Asp Ala Leu Pro Ala 35 40 45

Pro Trp Lys Pro Glu Phe Cys Leu Ser Ile Ile Cys Trp Leu Trp Leu 50 55 60

Lys Ser His Asn Leu Ala Leu Cys Val Leu His Gln Ser 65 70 75

- (2) INFORMATION FOR SEQ ID NO:3527:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 866 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..866
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577175
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3527: gttctctcct cctggctcct gggtctcatc tcctcccttc gcttcgcaag gccaacaagg 60 aactccacca cgcacggccg cacccgcacc cgcacccgct ctctgctgcc atggcgtcgt 120 cettegtege geteacegtt atgttegget teacegeage cetgtgetge etceagetee 180 teggegegga caccaeggee acgaecaega ceeagagegg tetegegege etggeegegg 240 cctccctggt cccggcggtc ctggscgccc tgacgctgac cccgctgcty gcgttcgcgc 300 gcgtgcacgC ccgtGccggg gcggaqgggg cqctcqtqtc qqqccttqcc aaqqcqaccc 360 tectogeggg gaeggtgget etegtegegg eggeegtggt geagetegge geegaeggge 420 acctcgaccg cggnccgacg acgtcgcgcg cctgaacgtg aagtgaagca agaagcaatc 480 coccectect tetteteetg actataaaaa taacetgege caagegtegg egtgtegteg 540 ctggaggcgt ctggacgacc ggaccactgc taggtccntc gctctgctcg atccgttcgg 600 agctcagcgc gtctgggctt tctgatggcg gcggcgtctg aaggagaagg gggtgattaa 660 tgtttggcgt gcccccgtgg ccgtgccggt aaaaaggagg atacttttat tttgttttcc 720 tccgtatatg ttggcctagt sttgcgcttc tggatttgtg gtaagctcac tgtctatgta 780 atcocactgg gactgggatt tcagtttgct ctttcatctc ctggacggtc ttgtaaatat 840 atatatat atactgtgtt tcagtt
- (2) INFORMATION FOR SEQ ID NO:3528:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 154 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..154
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577176
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3528:

Phe Ser Pro Pro Gly Ser Trp Val Ser Ser Pro Pro Phe Ala Ser Gln 1 5 10 15 Gly Gln Gln Gly Thr Pro Pro Arg Thr Ala Ala Pro Ala Pro Ala Pro

```
2.0
                              25
Ala Leu Cys Cys His Gly Val Val Leu Arg Arg Ala His Arg Tyr Val
                         40
Arg Leu His Arg Ser Pro Val Leu Pro Pro Ala Pro Arg Arg Gly His
                      55
His Gly His Asp His Asp Pro Glu Arg Ser Arg Ala Pro Gly Arg Gly
Leu Pro Gly Pro Gly Pro Xaa Arg Pro Asp Ala Asp Pro Ala Ala
                                  90
Xaa Val Arg Ala Arg Ala Arg Pro Cys Arg Gly Gly Gly Ala Arg
                  105
Val Gly Pro Cys Gln Gly Asp Pro Pro Arg Gly Asp Gly Gly Ser Arg
                         120
Arg Gly Gly Arg Gly Ala Ala Arg Arg Arg Ala Pro Arg Pro Arg
                   135
                                        140
Xaa Asp Asp Val Ala Arg Leu Asn Val Lys
       150
(2) INFORMATION FOR SEQ ID NO:3529:
    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 150 amino acids
         (B) TYPE: amino acid
         (C) STRANDEDNESS:
         (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
         (A) NAME/KEY: peptide
         (B) LOCATION: 1..150
         (D) OTHER INFORMATION: / Ceres Seq. ID 1577177
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3529:
Ser Leu Leu Leu Ala Pro Gly Ser His Leu Leu Pro Ser Leu Arg Lys
                                10
Ala Asn Lys Glu Leu His His Ala Arg Pro His Pro His Pro His Pro
    20
                             25
Leu Ser Ala Ala Met Ala Ser Ser Phe Val Ala Leu Thr Val Met Phe
                          4.0
                                             45
Gly Phe Thr Ala Ala Leu Cys Cys Leu Gln Leu Leu Gly Ala Asp Thr
Thr Ala Thr Thr Thr Gln Ser Gly Leu Ala Arg Leu Ala Ala Ala
                  70
                                     75
Ser Leu Val Pro Ala Val Leu Xaa Ala Leu Thr Leu Thr Pro Leu Xaa
              85
                                  90
Ala Phe Ala Arg Val His Ala Arg Ala Gly Ala Glu Gly Ala Leu Val
          100 105
Ser Gly Leu Ala Lys Ala Thr Leu Leu Ala Gly Thr Val Ala Leu Val
                         120
                                             125
Ala Ala Ala Val Val Gln Leu Gly Ala Asp Gly His Leu Asp Arg Xaa
                      135
Pro Thr Thr Ser Arg Ala
                  150
(2) INFORMATION FOR SEQ ID NO:3530:
    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 114 amino acids
         (B) TYPE: amino acid
         (C) STRANDEDNESS:
         (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
         (A) NAME/KEY: peptide
         (B) LOCATION: 1..114
```

(D) OTHER INFORMATION: / Ceres Seq. ID 1577178

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3530:

```
Met Ala Ser Ser Phe Val Ala Leu Thr Val Met Phe Gly Phe Thr Ala
                                    10
Ala Leu Cys Cys Leu Gln Leu Leu Gly Ala Asp Thr Thr Ala Thr Thr
Thr Thr Gln Ser Gly Leu Ala Arg Leu Ala Ala Ala Ser Leu Val Pro
                           40
Ala Val Leu Xaa Ala Leu Thr Leu Thr Pro Leu Xaa Ala Phe Ala Arg
                        55
Val His Ala Arg Ala Gly Ala Gly Ala Leu Val Ser Gly Leu Ala
                                        75
Lys Ala Thr Leu Leu Ala Gly Thr Val Ala Leu Val Ala Ala Ala Val
               8.5
                                   90
Val Gln Leu Gly Ala Asp Gly His Leu Asp Arg Xaa Pro Thr Thr Ser
           100
                               105
                                                   110
```

Arg Ala

- (2) INFORMATION FOR SEQ ID NO:3531:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 782 base pairs
 - (B) TYPE: nucleic acid (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..782
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577198
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3531: gccttcaacc atcgttagag tttccttggt agttttttc cctcttgtca cagcacccc 60 cacccacaca cacccaaggc cccaactgca gtgcccatcc ggcagacagg tcgatggcgg 120 cggaagcagc ggcagcghng gaaggagaag atgcggacgc tagtcagcag cgacttcaag 180 aagttegatg tggaggagte tgtggcgagg gaategetga ttateetgaa eetgatggeg 240 gactgcgacg acagtgacat cccggtcttc aacgtcaacg ccaatatcct cgacaaggtc 300 atcgcgtact gcaggaagca cgcctyggcg ccgcgcscga NTtggcggtg atgcggaGcc 360 aagtgctgcg agtaacaagg cctcagcgga cgatctcaag tcctttgatg ctgagttcgt 420 cgatgttgac ctggtcaccc tcttggagct cattaaggct gcagactacc tggagatcaa 480 tgggctgctg gacctgacct gccaggccgt cgcggacatg atcaagggga agactccaga 540 ggagatacgc gagacattcg acatcgagaa tgacttcaca cctgaggaag aggctaaagt 600 gaggagggag aatcagtggg cctttgaatg aagaagctgc aggctagctc taacaaaaca 660 atagcaatat catataacca ggccagagat gaagtgcttg ttcaggatgt tatgagtcga 720 aggtttggtt ggtcgtgagc agactatatt gctgttccag tattttggct ggtttggttc 780 CC
- (2) INFORMATION FOR SEQ ID NO:3532:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 53 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..53
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577199
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3532:
- Pro Ser Thr Ile Val Arg Val Ser Leu Val Val Phe Phe Pro Leu Val 5 1.0
- Thr Ala Pro Pro Thr His Thr His Pro Arg Pro Gln Leu Gln Cys Pro 25
- Ser Gly Arg Gln Val Asp Gly Gly Gly Ser Ser Gly Ser Xaa Gly Arg 35 40

Arg Arg Cys Gly Arg

50 (2) INFORMATION FOR SEQ ID NO:3533: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 66 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..66 (D) OTHER INFORMATION: / Ceres Seq. ID 1577200 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3533: Met Arg Thr Leu Val Ser Ser Asp Phe Lys Lys Phe Asp Val Glu Glu 10 5 Ser Val Ala Arg Glu Ser Leu Ile Ile Leu Asn Leu Met Ala Asp Cys 20 30 25 Asp Asp Ser Asp Ile Pro Val Phe Asn Val Asn Ala Asn Ile Leu Asp 35 40 Lys Val Ile Ala Tyr Cys Arg Lys His Ala Xaa Ala Pro Arg Xaa Xaa 55 Trp Arg 65 (2) INFORMATION FOR SEQ ID NO:3534: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 48 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..48 (D) OTHER INFORMATION: / Ceres Seq. ID 1577201 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3534: Met Arg Ser Gln Val Leu Arg Val Thr Arg Pro Gln Arg Thr Ile Ser 5 10 Ser Pro Leu Met Leu Ser Ser Ser Met Leu Thr Trp Ser Pro Ser Trp 20 25 Ser Ser Leu Arg Leu Gln Thr Thr Trp Arg Ser Met Gly Cys Trp Thr 4 0 (2) INFORMATION FOR SEQ ID NO:3535: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 870 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..870 (D) OTHER INFORMATION: / Ceres Seq. ID 1577206 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3535: caatgtegeg tgeggeeact agatttttee tgacgeggtg tetgeteeca ettegeetee totococcag gtggcggcag cggcggggg gtagcatttg tgctacgagg gcttttgcaa 120 tggcggcttc ggggttcrgc ggcggcgagg cgccaaaacc ctaccgccgc cgcgaatccc 180 gcacgacccc aaccatgacc gtgctgagcc gccctacccc gggcacggcc cagtgcttcg ggcggaagaa gaccgccgtc gcggtcgcgt acacqaaqcc ggggcgcgcgc ctgatcaaqg

tgaacggcgt cccgattgar ctgatccgac cggagatgct ccgcctcaag gccttcgagc

ccatcctgct ggcgggggc gtcccggttc aaggacatcg acatgcggat ccgcgtccrc 420 ggcgggggga agacgtcgca gatctacgcc atccgccAag vccgtcgsca aggggctcgt 480 cgcctactac cagaagtacg tcgacgagc cgcyaagaag gagatcaagg acatctttac 540 ccgctacgat cgcacctcc tcgtcgctga cccccggcgc tgcgagccga agaagttcgg 600 cggacgtggt gcccgcgca ggttccagaa gtcgtaccgt tgagcggctg cctgctccat 660 ctcgatttt cagatcgtt tgggtgttct tcgctttatt tcctatcaat ggatctgct 720 atctggttct tgcaatgtg aattaatgtg agagattatg agactttat tggctagtcc 780 aaaccttgtt tgcaatgtga aattaatgtg agagattatg aagactattt tggctagtcc 840 ctctattatg atttcatca ttccmgtatt

- (2) INFORMATION FOR SEQ ID NO:3536:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 250 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..250
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577207
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3536:
- Met Ser Arg Ala Ala Thr Arg Phe Phe Leu Thr Arg Cys Leu Leu Pro
 1 10 15
- Leu Pro Leu Ser Pro Arg Trp Arg Gln Arg Arg Arg Gly Ser Ile $20 \\ 25 \\ 30$
- Cys Ala Thr Arg Ala Phe Ala Met Ala Ala Ser Gly Phe Xaa Gly Gly 35 40 45
- Glu Ala Pro Lys Pro Tyr Arg Arg Glu Ser Arg Thr Thr Pro Thr 50 60
- Met Thr Val Leu Ser Arg Pro Thr Pro Gly Thr Ala Gln Cys Phe Gly 65 70 75 80
- Arg Lys Lys Thr Ala Val Ala Val Ala Tyr Thr Lys Pro Gly Arg Gly 85 90 95
- Leu Ile Lys Val Asn Gly Val Pro Ile Xaa Leu Ile Arg Pro Glu Met
 100 105 110
- Leu Arg Leu Lys Ala Phe Glu Pro Ile Leu Leu Ala Gly Ala Val Pro
 115
 120
 125
- Val Gln Gly His Arg His Ala Asp Pro Arg Xaa Arg Arg Glu Asp 130 135 140 Val Ala Asp Leu Arg His Pro Pro Xaa Pro Ser Xaa Arg Gly Ser Ser
- 145 150 155 160
 Pro Thr Thr Arg Ser Thr Ser Thr Arg Pro Xaa Arg Arg Arg Ser Arg
- 165 170 175
 Thr Ser Leu Pro Ala Thr Ile Ala Pro Ser Ser Ser Leu Thr Pro Gly
- Thr Ser Leu Pro Ala Thr Ile Ala Pro Ser Ser Ser Leu Thr Pro Gly

 180
 185
 190
- Ala Ala Ser Arg Arg Ser Ser Ala Asp Val Val Pro Ala Pro Gly Ser
 195
 200
 205
 Arg Ser Arg Thr Val Glu Arg Leu Pro Ala Pro Ser Arg Phe Phe Arg
- 210 215 220 Ser Leu Trp Val Phe Phe Ala Leu Phe Pro Ile Asn Gly Ser Ala Tyr

235

- Leu Val Leu Tyr Leu Ala Ala Ala Leu Pro 245 250
- (2) INFORMATION FOR SEQ ID NO:3537:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 211 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:

- (A) NAME/KEY: peptide
 (B) LOCATION: 1..211
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577209
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3537:

Met Ala Ala Ser Gly Phe Xaa Gly Gly Glu Ala Pro Lys Pro Tyr Arg

1 10 15

Arg Arg Glu Ser Arg Thr Thr Pro Thr Met Thr Val Leu Ser Arg Pro 20 25 30

Thr Pro Gly Thr Ala Gln Cys Phe Gly Arg Lys Lys Thr Ala Val Ala 35 40 45

Val Ala Tyr Thr Lys Pro Gly Arg Gly Leu Ile Lys Val Asn Gly Val
50 55 60

Pro Ile Xaa Leu Ile Arg Pro Glu Met Leu Arg Leu Lys Ala Phe Glu 65 70 75 80

Pro Ile Leu Leu Ala Gly Ala Val Pro Val Gln Gly His Arg His Ala 85 90 95

Asp Pro Arg Xaa Arg Arg Arg Glu Asp Val Ala Asp Leu Arg His Pro 100 105 110 Pro Xaa Pro Ser Xaa Arg Gly Ser Ser Pro Thr Thr Arg Ser Thr Ser

115 120 125

Thr Arg Pro Xaa Arg Arg Arg Ser Arg Thr Ser Leu Pro Ala Thr Ile

130 135 140

Ala Pro Ser Ser Ser Leu Thr Pro Gly Ala Ala Ser Arg Arg Ser Ser Ser

145 150 Ser Ser Ser Ser Ser Ser Ser Ser Arg Arg Ser Ser 145 150 155 160
Ala Asp Val Val Pro Ala Pro Gly Ser Arg Ser Arg Thr Val Glu Arg

165 170 175

Leu Pro Ala Pro Ser Arg Phe Phe Arg Ser Leu Trp Val Phe Phe Ala
180 185 190

Leu Phe Pro Ile Asn Gly Ser Ala Tyr Leu Val Leu Tyr Leu Ala Ala 195 200 205

Ala Leu Pro 210

- (2) INFORMATION FOR SEQ ID NO:3538:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 790 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..790
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577252
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3538:

atgetetace ggagtagege aacteegeaa geaaateete etateteeaa geeteeaate 60 tgtgaacggt gaaccccaat cgaatgacgc cgacggsagc ctcctcctcc cggctccccc 120 attogtotot atotocgatg tgcgccgcct ccagctcccc ccgcgcggcg gccaccggcc 180 tegeceetge tggaaggget tggagtgegg eteegtacag acgeggatgg tetettett 240 cgttgggagc agaacacgcc gcagaaacgt tatatgtgct tccctgttcg gagttggagc 300 tecegaagea etggteattg gagtagtege ettgttggtg tteggeecea agggtetage 360 agaggtagcc aggaatttgg ggaagacttt gcgtgctttc caaccaacca ttagagagat 420 acaggatgta tcaagggagt tcaggagcac tcttgaacga gaaatcggaa ttgatgaggt 480 ttcccagtcg acgaattata cacccacgac catgaataac aaccaacaac ctgctgccga 540 ctcaaatatc aagcctgcac ctgcacctta caccagcgat gaacttgtga aagtAactga 600 agaacaaatt gctgcatcag ctgctgcaga gagTtatcgt cagttggtgc ggtgtgtccg 660 cttaaacttt atttgtggtt ggttggtact tttgtggtgg ttatttttt ggacctcgtg 720 atagtcggtc ggttcaatgt tatcgcggct actggcaaac cttaagtgat acggtattct 780 tcttttcggt

- (2) INFORMATION FOR SEQ ID NO:3539:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 239 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..239
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577253
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3539:
- Cys Ser Thr Gly Val Ala Gln Leu Arg Lys Gln Ile Leu Leu Ser Pro $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$
- Ser Leu Gln Ser Val Asn Gly Glu Pro Gln Ser Asn Asp Ala Asp Xaa 20 25 30
- Ser Leu Leu Pro Ala Pro Pro Phe Val Ser Ile Ser Asp Val Arg
 35 40 45
- Arg Leu Gln Leu Pro Pro Arg Gly Gly His Arg Pro Arg Pro Cys Trp
- Lys Gly Leu Glu Cys Gly Ser Val Gln Thr Arg Met Val Ser Ser Phe 70 75 80
- Val Gly Ser Arg Thr Arg Arg Arg Asn Val Ile Cys Ala Ser Leu Phe 85 90 95
- Gly Val Gly Ala Pro Glu Ala Leu Val Ile Gly Val Val Ala Leu Leu 100 105 110
- Val Phe Gly Pro Lys Gly Leu Ala Glu Val Ala Arg Asn Leu Gly Lys 115 120 125
- Thr Leu Arg Ala Phe Gln Pro Thr Ile Arg Glu Ile Gln Asp Val Ser 130 135 140
- Arg Glu Phe Arg Ser Thr Leu Glu Arg Glu Ile Gly Ile Asp Glu Val 145 150 155 160
- Ser Gln Ser Thr Asn Tyr Thr Pro Thr Thr Met Asn Asn Asn Gln Gln 165 \$170\$ 175
- Pro Ala Ala Asp Ser Asn Ile Lys Pro Ala Pro Ala Pro Tyr Thr Ser 180 185 190
- Asp Glu Leu Val Lys Val Thr Glu Glu Gln Ile Ala Ala Ser Ala Ala 195 200 205
- Ala Glu Ser Tyr Arg Gln Leu Val Arg Cys Val Arg Leu Asn Phe Ile 210 215 220
- Cys Gly Trp Leu Val Leu Leu Trp Trp Leu Phe Phe Trp Thr Ser 225 230 235
- (2) INFORMATION FOR SEQ ID NO:3540:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 164 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..164
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577254
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3540:
- Met Val Ser Ser Phe Val Gly Ser Arg Thr Arg Arg Arg Asn Val Ile $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$
- Cys Ala Ser Leu Phe Gly Val Gly Ala Pro Glu Ala Leu Val Ile Gly 20 25 30
- Val Val Ala Leu Leu Val Phe Gly Pro Lys Gly Leu Ala Glu Val Ala 35 40 45
- Arg Asn Leu Gly Lys Thr Leu Arg Ala Phe Gln Pro Thr Ile Arg Glu 50 55 60
- Ile Gln Asp Val Ser Arg Glu Phe Arg Ser Thr Leu Glu Arg Glu Ile 65 70 75 80

- Gly Ile Asp Glu Val Ser Gln Ser Thr Asn Tyr Thr Pro Thr Thr Met 90 Asn Asn Asn Gln Gln Pro Ala Ala Asp Ser Asn Ile Lys Pro Ala Pro 100 105 110 Ala Pro Tyr Thr Ser Asp Glu Leu Val Lys Val Thr Glu Glu Gln Ile 115 120 Ala Ala Ser Ala Ala Ala Glu Ser Tyr Arg Gln Leu Val Arg Cys Val 135 Arg Leu Asn Phe Ile Cys Gly Trp Leu Val Leu Leu Trp Trp Leu Phe 145 150 155 Phe Trp Thr Ser
- (2) INFORMATION FOR SEQ ID NO:3541:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 859 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..859
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577263
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3541: agtettgtet getagaetgt egacagatte egeteeaaeg egeacetgea gteeegeaeg 60 ccctcgccca ccgtcgcctt tcaaaaagct ggaggattct cgagarggag aagcgcgcct 120 ggcagctccg ttccatccgc ccccacgaat gtccgacgar gccaggcgcg ggcccgcggg 180 cgccgcgcag gcgantgctc cgggcctcct ccgaggaccg caagccggtg ggcgctgggt 240 ccccggcggc ggttgcgcac aagatccagc tcaagagcgc cgatatgaag gaggagatgc 300 ggcaggacgc cttcgaaatt gcccgcatcg cgttcgataa gcacagcatg gagaaggaca tcgctgagta cataaagaag gagttcgaca agaaccacgg cccaaCcctg gcactgcatc gtcggccgca acttcggttc atacgtgacg cacgagacaa actactttgt atattctac atcgactcta aagctgtctt gctattcaag tctgggtgat tgctcgcagc cgacgcaatc 540 adocttgcac gcctacgttc cattgctccc atgtatgcac cgcacccttc cccccaggcc cagggtcgtc tgcagccaag ctggaagccg gtaatcttaa tgagcctgca tgttgatgta tatcagcaac ggattattct tcgtatgccc attagtgtga gatcagattg catcttactt 720 atgtctgata tatctagcta ggttaggtgt tgtgagtaca ttgtcttgtt gcaatatgat 780 tgccggacaa ctgggtgaac tgcctctcgt ctgtttgtga ttatctcaat agaagcgtcc 840 ttgctcatgc gtaatactc
- (2) INFORMATION FOR SEQ ID NO:3542:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 112 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..112
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577264
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3542:
- Val Leu Ser Ala Arg Leu Ser Thr Asp Ser Ala Pro Thr Arg Thr Cys $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$
- Ser Pro Ala Arg Pro Arg Pro Pro Ser Pro Phe Lys Lys Leu Glu Asp 20 25 30
- Ser Arg Xaa Gly Glu Ala Arg Leu Ala Ala Pro Phe His Pro Pro 35 40 45
- Arg Met Ser Asp Xaa Ala Arg Arg Gly Pro Ala Gly Ala Ala Gln Ala 50 55 60
- Xaa Ala Pro Gly Leu Leu Arg Gly Pro Gln Ala Gly Gly Arg Trp Val 65 70 75 80

Pro Gly Gly Gly Cys Ala Gln Asp Pro Ala Gln Glu Arg Arg Tyr Glu
85 90 95
Gly Gly Asp Ala Ala Gly Arg Leu Arg Asn Cys Pro His Arg Val Arg
100 105 110

- (2) INFORMATION FOR SEQ ID NO:3543:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 162 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..162
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577265
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3543:

Ser Cys Leu Leu Asp Cys Arg Gln Ile Pro Leu Gln Arg Ala Pro Ala 1 5 10 15

Val Pro His Ala Leu Ala His Arg Arg Leu Ser Lys Ser Trp Arg Ile 20 25 30

Leu Glu Xaa Glu Lys Arg Ala Trp Gln Leu Arg Ser Ile Arg Pro His $35 \hspace{1cm} 40 \hspace{1cm} 45$

Glu Cys Pro Thr Xaa Pro Gly Ala Gly Pro Arg Ala Pro Arg Arg Arg 50 55 60

Xaa Leu Arg Ala Ser Ser Glu Asp Arg Lys Pro Val Gly Ala Gly Ser 65 70 75 80

Pro Ala Ala Val Ala His Lys Ile Gln Leu Lys Ser Ala Asp Met Lys 85 90 95

Glu Glu Met Arg Gln Asp Ala Phe Glu Ile Ala Arg Ile Ala Phe Asp 100 105 110

Lys His Ser Met Glu Lys Asp Ile Ala Glu Tyr Ile Lys Lys Glu Phe
115 120 125

Asp Lys Asn His Gly Pro Thr Leu Ala Leu His Arg Arg Pro Gln Leu 130 135 140

Arg Phe Ile Arg Asp Ala Arg Asp Lys Leu Cys Ile Phe Leu His 145 \$150\$ 150 \$150\$ 160 Arg Leu

Arg Leu

- (2) INFORMATION FOR SEQ ID NO:3544:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 521 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..521
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577296
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3544:

aggtgatggt ttttttggta gatcaaatca aggaatattt c

taagattatt gatgttatcg agaagggaga gaaacagccc aacatcacta ttqqcatttt 60 ggtctccgtt gtcatcgtgt tcgttaccgt tctctgcaag ctcctgtttg gtggcaagaa 120 accagtggca cctgtgaaac ctgcagctga ggcgaagaag cccaaggccg cggagacgga 180 cggtgctgga agcagtggtg acaaggatga gaaagaggat gaaaaggagg agacaggccc 240 acgtcggagg acccgaaggr agNacataga cctgtttttg acgtgtttta gctcttctqq 300 cgtctgctta ttttgagaac tcttaatatt tgtgagtgta taataggagc ttatgtcacc 360 tetgeggett ceceegetge tgatttgttt ttaatggtta gaccaggace etteaegage 420 gtagaattta gttcttgttg gtcatttatg tgctgtgcct gacggtgttc aatcagatag 480

- Client Docket No. 80145.003 (2) INFORMATION FOR SEQ ID NO:3545: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 104 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..104 (D) OTHER INFORMATION: / Ceres Seq. ID 1577297 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3545: Lys Ile Ile Asp Val Ile Glu Lys Gly Glu Lys Gln Pro Asn Ile Thr 10 Ile Gly Ile Leu Val Ser Val Val Ile Val Phe Val Thr Val Leu Cys 20 25 30 Lys Leu Leu Phe Gly Gly Lys Lys Pro Val Ala Pro Val Lys Pro Ala 40 Ala Glu Ala Lys Lys Pro Lys Ala Ala Glu Thr Asp Gly Ala Gly Ser 55 Ser Gly Asp Lys Asp Glu Lys Glu Asp Glu Lys Glu Glu Thr Gly Pro 70 75 Arg Arg Arg Thr Arg Arg Xaa Xaa Ile Asp Leu Phe Leu Thr Cys Phe 85 90 Ser Ser Ser Gly Val Cys Leu Phe 100 (2) INFORMATION FOR SEQ ID NO:3546: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 811 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..811 (D) OTHER INFORMATION: / Ceres Seq. ID 1577302 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3546: aggaagaaag gaacccacca aagcttcaaa aaaagaaaaa gagctgcaca ctqqtcactq gaaaacgaag gcaaacceta atcgctactc caccgcagcg cccactacac cgatcgqgct 120 cegatggact tegeggastg gaggeegtgg agggeeteeg gtggeeatgg cactegtgge 180 egeogactae eccegeogee gegteecteg tegtgeecae etcegteete tgetegeoge 240 tgcagcaccc cacggcgccg gacctcctcc cgctgctacc ctacgcgccg ctccqctqcq 300 cctcccggg ttgtggcgcc gcgctcaacc cgttctcgcg cgtgcaccac ggCtccgcgc 360 getggteetg egeettetgt Ggegeegeeg ceaaccegtt eeceegeeta etggeeceeg 420 acgcgctccc cgccgaactc ttccccaccc actccagcgt cgagtacttg ctgcccccgg 480 accccgctga gcccggggga ccggggccac ctgcgctcgt gttcgtgatc gatgcggcca 540 eggeggeega ggageteace gtgeteaagg acgaggtgeg caggeteatg cagggetge 600 ctgaggggat cagggtggcg ctcgtcactt tcgctgcgtc tgtgtgggtg cacgatcttg 660 gatttgaggg ttgcgctcgg gtggttgtgc ttaatggcga gcgtgagctc gagtctgaca 720 aggtttgtga atttgtaata taatcettag gacacegaat ttgtaatttg gttetgegee 780
- aatctatgtg acatgatcag cattctagtt c (2) INFORMATION FOR SEQ ID NO:3547:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 162 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..162
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577303
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3547:
- Thr Gly His Trp Lys Thr Lys Ala Asn Pro Asn Arg Tyr Ser Thr Ala 20 25 30
- Ala Pro Thr Thr Pro Ile Gly Leu Arg Trp Thr Ser Arg Xaa Gly Gly 35 40 45
- Arg Gly Gly Pro Pro Val Ala Met Ala Leu Val Ala Ala Asp Tyr Pro 50 55 60
- Arg Arg Val Pro Arg Arg Ala His Leu Arg Pro Leu Leu Ala Ala 65 70 75 80
- Ala Ala Pro His Gly Ala Gly Pro Pro Pro Ala Ala Thr Leu Arg Ala 85 90 95
- Ala Pro Leu Arg Leu Pro Gly Leu Trp Arg Arg Ala Gl
n Pro Val Leu 100 105 110
- Ala Arg Ala Pro Arg Leu Arg Ala Leu Val Leu Arg Leu Trp Arg 115 120 125
- Arg Arg Gln Pro Val Pro Pro Pro Thr Gly Pro Arg Arg Ala Pro Arg 130 135 140
- Arg Thr Leu Pro His Pro Leu Gln Arg Arg Val Leu Ala Ala Pro Gly 145 150 155
- Pro Arg
- (2) INFORMATION FOR SEQ ID NO:3548:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 246 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..246
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577304
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3548:
- Glu Glu Arg Asn Pro Pro Lys Leu Gln Lys Lys Lys Ser Cys Thr
 1 5 10 15
- Leu Val Thr Gly Lys Arg Arg Gln Thr Leu Ile Ala Thr Pro Pro Gln
 20 25 30
- Arg Pro Leu His Arg Ser Gly Ser Asp Gly Leu Arg Gly Xaa Glu Ala
 35
 40
 45
- Val Glu Gly Leu Arg Trp Pro Trp His Ser Trp Pro Pro Thr Thr Pro 50 55 60
- Ala Ala Ser Leu Val Val Pro Thr Ser Val Leu Cys Ser Pro Leu 65 70 75 80
- Gln His Pro Thr Ala Pro Asp Leu Leu Pro Leu Leu Pro Tyr Ala Pro
 85 90 95
- Leu Arg Cys Ala Ser Pro Gly Cys Gly Ala Ala Leu Asn Pro Phe Ser 100 105 110
- Arg Val His His Gly Ser Ala Arg Trp Ser Cys Ala Phe Cys Gly Ala 115 120 125
- Ala Ala Asn Pro Phe Pro Arg Leu Leu Ala Pro Asp Ala Leu Pro Ala 130 135 140
- Glu Leu Phe Pro Thr His Ser Ser Val Glu Tyr Leu Leu Pro Pro Asp 145 150 155 160
- Pro Ala Glu Pro Gly Gly Pro Gly Pro Pro Ala Leu Val Phe Val Ile
 165 170 175
- Asp Ala Ala Thr Ala Ala Glu Glu Leu Thr Val Leu Lys Asp Glu Val 180 185 190

600

660

```
Arg Arg Leu Met Gln Gly Leu Pro Glu Gly Ile Arg Val Ala Leu Val
                            200
Thr Phe Ala Ala Ser Val Trp Val His Asp Leu Gly Phe Glu Gly Cys
                        215
                                        220
Ala Arg Val Val Leu Asn Gly Glu Arg Glu Leu Glu Ser Asp Lys
                    230
                                        235
Val Cys Glu Phe Val Ile
                245
(2) INFORMATION FOR SEQ ID NO:3549:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 134 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..134
          (D) OTHER INFORMATION: / Ceres Seq. ID 1577305
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3549:
Met Asp Phe Ala Xaa Trp Arg Pro Trp Arg Ala Ser Gly Gly His Gly
                                    1.0
Thr Arg Gly Arg Arg Leu Pro Pro Pro Pro Arg Pro Ser Ser Cys Pro
            20
                                25
Pro Pro Ser Ser Ala Arg Arg Cys Ser Thr Pro Arg Arg Arg Thr Ser
       35
                            40
                                                45
Ser Arg Cys Tyr Pro Thr Arg Arg Ser Ala Ala Pro Pro Arg Val Val
                        55
                                            60
Ala Pro Arg Ser Thr Arg Ser Arg Ala Cys Thr Thr Ala Pro Arg Ala
                    70
                                        75
Gly Pro Ala Pro Ser Val Ala Pro Pro Pro Thr Arg Ser Pro Ala Tyr
               8.5
                                    90
Trp Pro Pro Thr Arg Ser Pro Pro Asn Ser Ser Pro Pro Thr Pro Ala
            100
                               105
                                                   110
Ser Ser Thr Cys Cys Pro Arg Thr Pro Leu Ser Pro Gly Asp Arg Gly
      115
                            120
                                                125
His Leu Arg Ser Cys Ser
    130
(2) INFORMATION FOR SEQ ID NO:3550:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 887 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..887
          (D) OTHER INFORMATION: / Ceres Seq. ID 1577310
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3550:
acctgacggg ctcgcatcgc acccgccacc cccaccgcac gcaccctctc gtcctctctq
cgccgacccg gctcttctcc cccaacacaa tcctccttcc ccgatccagt ctcgcggtcg
                                                                      120
cggccacgct gagggacagc gagaagagac agacacagat cgcgcgcgga gatgtcgtcg
                                                                      180
gactegtegt egtgggegeg egecetggtg cagatetege ectacacett etecqcaate
                                                                      240
ggtatcgccg tctccatcgg cgtctccgtc ctcggcgcgg catggggtat cttcatcacg
                                                                      300
gggagcagcc tcatcggggc cgccatcaag gcgcccagga tcacttctaa gaacctcatc
                                                                      360
agtgtcatct tctgtgaggc tgtcgcaatt tatggcgtaa ttgtggcaat catcctccaq
                                                                      420
acaaagcttg aaagtgtgcc aacatctcaa atgtatgatc cggagtctct tcgagctggc
                                                                      480
tatgcaatct ttgcatctgg ccttatcgtt ggctttgcta atcttgtttg cggggtatgc
                                                                      540
```

Ggtggggata attggaagca Gctgcgcact gtctgatgct cagaactcat cactcttcgt

aaagattttg gtgattgaga tcttcggcag cgctctggga ctgttcggtg tcattgtqqq

catcattatg tcatctcaag cgacatggcc agcaaaagct tgattttcac catttgtagc 720 tctgtaaatt attcagatgg agtgtatcga aatgtgcatg tggtctaact gcattttcat 780 gttcctttta tgtggcgtct tttttggcag aacacgaaat gcggcgcsgt accgccaccg 840 attgtagagt tgctattctt actgccggag tactccatgt gtgttgg

- (2) INFORMATION FOR SEQ ID NO:3551:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 132 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..132
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577311
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3551:

Pro Asp Gly Leu Ala Ser His Pro Pro Pro Pro Pro His Ala Pro Ser 1 5 10 15

Arg Pro Leu Cys Ala Asp Pro Ala Leu Leu Pro Gln His Asn Pro Pro
20 25 30

Ser Pro Ile Gln Ser Arg Gly Arg Gly His Ala Glu Gly Gln Arg Glu
35 40 45

Glu Thr Asp Thr Asp Arg Ala Arg Arg Cys Arg Arg Thr Arg Arg Arg 50 55

Gly Arg Ala Pro Trp Cys Arg Ser Arg Pro Thr Pro Ser Pro Gln Ser 65 70 75 80

Val Ser Pro Ser Pro Ser Ala Ser Pro Ser Ser Ala Arg His Gly Val
85 90 95

Ser Ser Ser Arg Gly Ala Ala Ser Ser Gly Pro Pro Ser Arg Arg Pro 100 105 110

Gly Ser Leu Leu Arg Thr Ser Ser Val Ser Ser Ser Val Arg Leu Ser 115 120 125

Gln Phe Met Ala

130

- (2) INFORMATION FOR SEQ ID NO:3552:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..115
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577312
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3552:

Leu Thr Gly Ser His Arg Thr Arg His Pro His Arg Thr His Pro Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Val Leu Ser Ala Pro Thr Arg Leu Phe Ser Pro Asn Thr Ile Leu Leu 20 25 30

Pro Arg Ser Ser Leu Ala Val Ala Ala Thr Leu Arg Asp Ser Glu Lys

Arg Gln Thr Gln Ile Ala Arg Gly Asp Val Val Gly Leu Val Val Val 50 55

Gly Ala Arg Pro Gly Ala Asp Leu Ala Leu His Leu Leu Arg Asn Arg 65 70 75 80

Tyr Arg Arg Leu His Arg Arg Leu Arg Pro Arg Arg Gly Met Gly Tyr 85 90 95

Leu His His Gly Glu Gln Pro His Arg Gly Arg His Gln Gly Ala Gln
100 105 110

Asp His Phe

- (2) INFORMATION FOR SEQ ID NO:3553:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 134 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..134
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577313
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3553:

Met Ser Ser Asp Ser Ser Ser Trp Ala Arg Ala Leu Val Gln Ile Ser 1 5 10 15

Pro Tyr Thr Phe Ser Ala Ile Gly Ile Ala Val Ser Ile Gly Val Ser 20 25 30

Val Leu Gly Ala Ala Trp Gly Ile Phe Ile Thr Gly Ser Ser Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Ala Ala Ile Lys Ala Pro Arg Ile Thr Ser Lys Asn Leu Ile Ser 50 55 60

Val Ile Phe Cys Glu Ala Val Ala Ile Tyr Gly Val Ile Val Ala Ile 65 70 75 80

Ile Leu Gl
n Thr Lys Leu Glu Ser Val Pro Thr Ser Gl
n Met Tyr Asp $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Pro Glu Ser Leu Arg Ala Gly Tyr Ala Ile Phe Ala Ser Gly Leu Ile 100 105 110

Val Gly Phe Ala Asn Leu Val Cys Gly Val Cys Gly Gly Asp Asn Trp
115 120 125

Lys Gln Leu Arg Thr Val 130

- (2) INFORMATION FOR SEQ ID NO:3554:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 876 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..876
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577318
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3554:

atccgaaacc agagcgaaga atcgccatca cagcaagcta cgcgcactga aatcctccaa 60 tocacaggac acagetetae tteegeagtt egeactegea egeaceaage egetageaae 120 gaagcagaaa tgtcgctggt gaggcgcasa gcgtgttcga cccattctcc gtggacctct 180 tegaceegtt egacageatg tteegeteea tegtgeegte gtegtegteg tegggeteeg 240 agaccgccgc cttcgccagc gcccgcatcg actggaagga gacgcccgag gcgcacgtgt 300 tcaaggccga cctccccggc gtgaagaaag aggaggtcaa ggtggaggtg gaggacggca 360 acgtgctgct catcagcggg cagcgcaGca gggagaagga ggacaagggc gacaagtggc 420 accgcgtgga gcgcagcagc ggccagttcg tgcggcgctt ccgcctgccg gagaacgcca 480 agacggagga ggtgagggcc gcgctggaga acggcgtgct cacggtcacc gtgcccaagg 540 ccgaggtcaa gaagcccgag gtgaagagca tccagatctc cggctgaaga agacatggac 600 gggaggtgaa tggntcgcgt cgcgttcgcg tcgcggcgtc ggatcttggg tttcagcgac 660 gcgactcgtg tgtgtgtgct gtgtggttgc tctgctttgg tatgtttggt gtgtacgtgt 720 gctgttcagt gtttcctggt cctcgtctgt actttgcgct gttcggtgag cttcctqgct 780 cagtatgttg tgttgtgcga gtgaataaat aaawacaaac cagctgtagt atattcacct 840 actactatcg tgtttcaaaa agaagaaaga acgctt

- (2) INFORMATION FOR SEQ ID NO:3555:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 107 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..107
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577319
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3555:
- Ile Arg Asn Gln Ser Glu Glu Ser Pro Ser Gln Gln Ala Thr Arg Thr 1 5 10 15
- Glu Ile Leu Gln Ser Thr Gly His Ser Ser Thr Ser Ala Val Arg Thr 20 25 30
- Arg Thr His Gln Ala Ala Ser Asn Glu Ala Glu Met Ser Leu Val Arg 35 40 45
- Arg Xaa Ala Cys Ser Thr His Ser Pro Trp Thr Ser Ser Thr Arg Ser 50 55 60
- Thr Ala Cys Ser Ala Pro Ser Cys Arg Arg Arg Arg Arg Arg Ala Pro 65 70 75 80
- Arg Pro Pro Pro Ser Pro Ala Pro Ala Ser Thr Gly Arg Arg Pro
 85 90 95
- Arg Arg Thr Cys Ser Arg Pro Thr Ser Pro Ala 100 105
- (2) INFORMATION FOR SEQ ID NO:3556:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 64 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..64
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577320
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3556:
- Met Ser Leu Val Arg Arg Xaa Ala Cys Ser Thr His Ser Pro Trp Thr $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$
- Ser Ser Thr Arg Ser Thr Ala Cys Ser Ala Pro Ser Cys Arg Arg Arg 20 25 30
- Arg Arg Ala Pro Arg Pro Pro Pro Ser Pro Ala Pro Ala Ser Thr 35 40 45
- Gly Arg Arg Pro Arg Arg Thr Cys Ser Arg Pro Thr Ser Pro Ala 50 55
- (2) INFORMATION FOR SEQ ID NO:3557:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 129 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..129
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577321
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3557:
- Met Phe Arg Ser Ile Val Pro Ser Ser Ser Ser Ser Gly Ser Glu Thr 1 5 10 15
- Ala Ala Phe Ala Ser Ala Arg Ile Asp Trp Lys Glu Thr Pro Glu Ala 20 25 30

 His
 Val
 Phe
 Lys
 Ala
 Asp
 Leu
 Pro
 Gly
 Val
 Lys
 Lys
 Glu
 Glu
 Val
 Lys

 Val
 Glu
 Val
 Glu
 Asp
 Gly
 Asp
 Val
 Leu
 Leu
 Leu
 Ile
 Ser
 Gly
 Gln
 Arg
 Ser

 Arg
 Glu
 Lys
 Glu
 Asp
 Lys
 Gly
 Asp
 Lys
 Trp
 His
 Arg
 Val
 Glu
 Arg
 Ser

 65
 70
 75
 75
 80

Ser Gly Gln Phe Val Arg Arg Phe Arg Leu Pro Glu Asn Ala Lys Thr 85 90 95

Glu Glu Val Arg Ala Ala Leu Glu As
n Gly Val Leu Thr Val Thr Val 100 105 110

Pro Lys Ala Glu Val Lys Lys Pro Glu Val Lys Ser Ile Gln Ile Ser 115 120 125

Gly

- (2) INFORMATION FOR SEQ ID NO:3558:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 529 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..529
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577346
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3558:

acggccaatc aggagtcCaa aggccCacat gtatcMagag cacgtccgtc gcccctqga 60 ccacgcagcc Cggcagccca gagccggaga gcccagtgaa acagagccgg tgaacgcagc 120 ccagtcagtg accccccga tcccgactcc ggcgatctcc ccaaccccat ggcctccqcc 180 ggcgaggccc ccagcacgct cctccgcttc ctctacttcg tcggcgccgg agtaatctgc 240 accaaggcca tcaacaccta tcgcgactac gagcacaaga aggagtccac cgccgcctc 300 geogeogeog aateggCgtG tggctgctgc cgcggcggcc gagcccgctc ctgcaaccgc 360 cgccgcgaag ccCtgattgt ggacgagggc ctgtcttcgg cggttagggt tctcggaatg 420 ttgctctcca taggggagat agatattttc ttttgtttct gatgtttcag ctacgtgtat 480 gtgctctttt ggcttgaatc aatcagtaat aatacttctc ttcctgtct

- (2) INFORMATION FOR SEQ ID NO:3559:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..77
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577347
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3559:

Arg Pro Ile Arg Ser Pro Lys Ala His Met Tyr Xaa Glu His Val Arg

1 10 15

Arg Pro Leu Asp His Ala Ala Arg Gln Pro Arg Ala Gly Glu Pro Ser 20 25 30

Glu Thr Glu Pro Val Asn Ala Ala Gln Ser Val Thr Pro Pro Ile Pro 35 40 45

Thr Pro Ala Ile Ser Pro Thr Pro Trp Pro Pro Pro Ala Arg Pro Pro 50 55 60

Ala Arg Ser Ser Ala Ser Ser Thr Ser Ser Ala Pro Glu 65 70 75

- (2) INFORMATION FOR SEQ ID NO:3560:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 68 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..68
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577348
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3560:

Met Tyr Xaa Glu His Val Arg Arg Pro Leu Asp His Ala Ala Arg Gln
1 10 15

Pro Arg Ala Gly Glu Pro Ser Glu Thr Glu Pro Val Asn Ala Ala Gln 20 25 30

Ser Val Thr Pro Pro Ile Pro Thr Pro Ala Ile Ser Pro Thr Pro Trp 35 40 45

Pro Pro Pro Ala Arg Pro Pro Ala Arg Ser Ser Ala Ser Ser Thr Ser 50 55 60

Ser Ala Pro Glu

65

- (2) INFORMATION FOR SEQ ID NO:3561:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 97 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..97
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577349
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3561:

Met Ala Ser Ala Gly Glu Ala Pro Ser Thr Leu Leu Arg Phe Leu Tyr 1 $$ 5 $$ 10 $$ 15

Phe Val Gly Ala Gly Val Ile Cys Thr Lys Ala Ile Asn Thr Tyr Arg 20 25 30

Asp Tyr Glu His Lys Lys Glu Ser Thr Ala Ala Leu Ala Ala Glu 35 40 45

Ser Ala Cys Gly Cys Cys Arg Gly Gly Arg Ala Arg Ser Cys Asn Arg 50 55 60

Arg Arg Glu Ala Leu Ile Val Asp Glu Gly Leu Ser Ser Ala Val Arg
65 70 75 80

Val Leu Gly Met Leu Leu Ser Ile Gly Glu Ile Asp Ile Phe Phe Cys
85 90 95

Phe

- (2) INFORMATION FOR SEQ ID NO:3562:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 737 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..737
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577353
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3562:

aaaaaattaa aatcctcccg gaaatcagag acgcgaatcc ctcgccccag gccccgaaac 60 ctccgagttc tctcgccaat tcgatccgcc tcaccgccgc cgcccgtccg ccggtcggcc 120 ttgactgctc cgtcgcacgt ggcggttcgc agcgcggaat ctaccttgtg ttgagagatc cgggggaaacc cttgttcccg gtcgttccgg ctcgaatctt ctgcggactg gcaatgtaag 240 cgttctccat cggagggcga cgatctacgg ggcggttgtt ggcggggttk agggaatgga 300

gcacgtgttc ggagggaagt ttaagcttgg gaagaagatc gggaggggat Cctttcggcg 360 agctctatct cggcgtcaac atacagagcg gcgaggaggt ggctatcaag ttggtatgag 420 ataatctgat actgttcgtg caccatttt ctctgycgtg gagttatatg cctggcattc 480 ggcatgagtt tgttccatat gcaaacatat catggtcaac cattctagca acggtttcgt 540 gaagaatttg tgtgtagatt atgggatgac agaaaatgga tgatgttctg catgtaattg 600 ctttaaaaaa gactggcatg gtcccgagct atattttac atgagtaata acaagattt 660 caaacctttt cttggttgta catgcgaatt aacctgtgga tccagttcta attccaatca 720 tggttttgtt accttc

- (2) INFORMATION FOR SEQ ID NO:3563:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 57 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..57
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577354
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3563:

Lys Lys Leu Lys Ser Ser Arg Lys Ser Glu Thr Arg Ile Pro Arg Pro
1 10 15

Arg Pro Arg Asn Leu Arg Val Leu Ser Pro Ile Arg Ser Ala Ser Pro 20 25 30

Pro Pro Pro Val Arg Arg Ser Ala Leu Thr Ala Pro Ser His Val Ala 35 40 45

- Val Arg Ser Ala Glu Ser Thr Leu Cys 50 55
- (2) INFORMATION FOR SEQ ID NO:3564:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 78 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..78
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577355
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3564:

Lys Ile Lys Ile Leu Pro Glu Ile Arg Asp Ala Asn Pro Ser Pro Gln 1 5 10 15

Ala Pro Lys Pro Pro Ser Ser Leu Ala As
n Ser Ile Arg Leu Thr Ala 20 25 30

Ala Ala Arg Pro Pro Val Gly Leu Asp Cys Ser Val Ala Arg Gly Gly 35 40 45

Ser Gln Arg Gly Ile Tyr Leu Val Leu Arg Asp Pro Gly Lys Pro Leu 50 55 60

Phe Pro Val Val Pro Ala Arg Ile Phe Cys Gly Leu Ala Met 65 70 75

- (2) INFORMATION FOR SEQ ID NO:3565:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 42 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..42
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577356

- Attorney Docket No. 2750-1235P Client Docket No. 80145.003 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3565: Met Glu His Val Phe Gly Gly Lys Phe Lys Leu Gly Lys Lys Ile Gly 10 Ser Gly Ser Phe Arg Arg Ala Leu Ser Arg Arg Gln His Thr Glu Arg 25 Arg Gly Gly Tyr Gln Val Gly Met Arg 35 40 (2) INFORMATION FOR SEQ ID NO:3566: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 667 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..667 (D) OTHER INFORMATION: / Ceres Seq. ID 1577374 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3566:
- egggeeacet egagetgege aacegegace eegacgacaa eeegetggtg aegtteaact 60 acttetegea eecegaggae eteegeeget gegtggeegg ettgteggte ategagegeg 120 teatecacte ecaggeette aagaacttea egtaceeega ettetecatg gagaegetge 180 teaacatgte gacggggtte eccgteaace tgetgeeceg geacgacaac gactecaegt 240 egettgagat gttetgeaag gacacegtea tgaccatetg geactaceae ggtggetgee 300 aggtcggcag ggtcgtcgac gctgaatacc gagtgctcgg catcgaCGcg ctgcgcgtca 360 ttgacggctc cactttcaac gcctcgccag gaaccaaccc gcaggcaacc gtcatgatgc 420 tcggcaggta tatgggagtc agaatcacaa acgaaaggtt ggcagctgaa ggattagagg 480 gaacaaaacc gtgatgatcc tataatccaa gacagtaggc gaggcgtaTt taagaatctc 540 tattgaacta tgtaatgctg gattcaatat tgttggtgtg attctgatat tgataggttg 600 cacatattgt cggagttgta tcatgttgtt tgttgttact atgtggacta ttatgagtga 660 aatctqc
- (2) INFORMATION FOR SEQ ID NO:3567:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 163 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..163
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577375
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3567:
- Gly His Leu Glu Leu Arg Asn Arg Asp Pro Asp Asp Asn Pro Leu Val 10
- Thr Phe Asn Tyr Phe Ser His Pro Glu Asp Leu Arg Arg Cys Val Ala 20 25 30
- Gly Leu Ser Val Ile Glu Arg Val Ile His Ser Gln Ala Phe Lys Asn 40
- Phe Thr Tyr Pro Asp Phe Ser Met Glu Thr Leu Leu Asn Met Ser Thr 55 60
- Gly Phe Pro Val Asn Leu Leu Pro Arg His Asp Asn Asp Ser Thr Ser 70 75
- Leu Glu Met Phe Cys Lys Asp Thr Val Met Thr Ile Trp His Tyr His 90 85
- Gly Gly Cys Gln Val Gly Arg Val Val Asp Ala Glu Tyr Arg Val Leu 105 100 110
- Gly Ile Asp Ala Leu Arg Val Ile Asp Gly Ser Thr Phe Asn Ala Ser 115 120 125
- Pro Gly Thr Asn Pro Gln Ala Thr Val Met Met Leu Gly Arg Tyr Met 130 135 140

Gly Val Arg Ile Thr Asn Glu Arg Leu Ala Ala Glu Gly Leu Glu Gly 145 \$150\$ 150 \$155\$ 160 Thr Lys Pro

- (2) INFORMATION FOR SEQ ID NO:3568:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..108
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577376
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3568:

Met Glu Thr Leu Leu Asn Met Ser Thr Gly Phe Pro Val Asn Leu Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Pro Arg His Asp Asn Asp Ser Thr Ser Leu Glu Met Phe Cys Lys Asp
20 25 30

Thr Val Met Thr Ile Trp His Tyr His Gly Gly Cys Gln Val Gly Arg
35 40 45

Val Val Asp Ala Glu Tyr Arg Val Leu Gly Ile Asp Ala Leu Arg Val 50 60

Ile Asp Gly Ser Thr Phe Asn Ala Ser Pro Gly Thr Asn Pro Gln Ala 65 70 75 80

Thr Val Met Met Leu Gly Arg Tyr Met Gly Val Arg Ile Thr Asn Glu
85 90 95

Arg Leu Ala Ala Glu Gly Leu Glu Gly Thr Lys Pro
100 105

- (2) INFORMATION FOR SEQ ID NO:3569:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..102
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577377
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3569:

Met Ser Thr Gly Phe Pro Val Asn Leu Leu Pro Arg His Asp Asn Asp 1 5 10 15

Ser Thr Ser Leu Glu Met Phe Cys Lys Asp Thr Val Met Thr Ile Trp 20 25 30

His Tyr His Gly Gly Cys Gln Val Gly Arg Val Val Asp Ala Glu Tyr 35 40 45

Arg Val Leu Gly Ile Asp Ala Leu Arg Val Ile Asp Gly Ser Thr Phe 50

Asn Ala Ser Pro Gly Thr Asn Pro Gln Ala Thr Val Met Met Leu Gly 65 70 75 80

Arg Tyr Met Gly Val Arg Ile Thr Asn Glu Arg Leu Ala Ala Glu Gly 85 90 95

Leu Glu Gly Thr Lys Pro 100

- (2) INFORMATION FOR SEQ ID NO:3570:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 722 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..722
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577378
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3570:

(,	- <u>-</u>		-			
gctctcatcc	ggctcttcgc	ggggctcaac	ctcagcgtca	ccgacctggt	cgcgctctcg	60
ggctcgcact	ccatcggcga	ggcccgctgc	ttctccatcg	tcttccgcct	ctacaaccag	120
tctggatccg	gccgccccga	cccgcacatg	gacaccgcct	accgccgctc	gctcgacgca	180
ctctgcccca	agggcggcga	cgaggaggtc	acgggaggcc	tggacgccac	cccacgcatc	240
ttcgacaacc	agtacttcga	ggacctcgty	Gagatacgag	gcttcctcaa	ctccgaccag	300
acgctcttct	ctgacaacac	caggacccgt	cgggtcgtcg	agcggctcag	caaggaccag	360
gacgccttct	tcagggcctt	catcgagggg	atgataaaga	tgggggagct	ccaaaacccc	420
aggaaagggg	agatacggcg	caactgNtcg	cgttgctaac	aactcgccgt	ggcaaccaag	480
gacggggatg	gcgtccggac	agtcgacatc	tgagctccgg	tgatgaggtt	ggtgtttcag	540
aagaaatcga	gccctgatat	ggtactaata	tgttgacatg	cattgttgtt	tttttggtcg	600
tgtgtaagtt	ttgcacctac	ctatggctgt	ggtgcnccrg	tgcgctcatt	gctgacgtgg	660
ggaataattg	agacattgtg	ccttagctcc	aataacgttc	aatatattta	tcctttatat	720
ca						

- (2) INFORMATION FOR SEQ ID NO:3571:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 152 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..152
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577379
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3571:
- Ala Leu Ile Arg Leu Phe Ala Gly Leu Asn Leu Ser Val Thr Asp Leu 1 5 10 15
- Val Ala Leu Ser Gly Ser His Ser Ile Gly Glu Ala Arg Cys Phe Ser 20 25 30
- Ile Val Phe Arg Leu Tyr Asn Gln Ser Gly Ser Gly Arg Pro Asp Pro 35 40 45
- His Met Asp Thr Ala Tyr Arg Arg Ser Leu Asp Ala Leu Cys Pro Lys
 50
 60
 Cly Cly Asp Cly Cly Cly Cly Ley Asp Ala The Dry Arg Lla
- Gly Gly Asp Glu Glu Val Thr Gly Gly Leu Asp Ala Thr Pro Arg Ile 70 75 80
- Phe Asp Asn Gln Tyr Phe Glu Asp Leu Xaa Ala Leu Arg Gly Phe Leu 85 90 95
- Asn Ser Asp Gln Thr Leu Phe Ser Asp Asn Thr Arg Thr Arg Val 100 105 110
- Val Glu Arg Leu Ser Lys Asp Gln Asp Ala Phe Phe Arg Ala Phe Ile 115 120 125
- Glu Gly Met Ile Lys Met Gly Glu Leu Gln Asn Pro Arg Lys Gly Glu 130 135 140
- Ile Arg Arg Asn Xaa Ser Arg Cys
- 145 150
- (2) INFORMATION FOR SEQ ID NO:3572:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 130 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..130
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577380
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3572:

Leu Ser Ser Gly Ser Ser Arg Gly Ser Thr Ser Ala Ser Pro Thr Trp

5 10 15

Ser Arg Ser Arg Ala Arg Thr Pro Ser Ala Arg Pro Ala Ala Ser Pro 20 25 30

Ser Ser Ser Ala Ser Thr Thr Ser Leu Asp Pro Ala Ala Pro Thr Arg 35 40 45

Thr Trp Thr Pro Pro Thr Ala Ala Arg Ser Thr His Ser Ala Pro Arg 50 55 60

Ala Ala Thr Arg Arg Ser Arg Glu Ala Trp Thr Pro Pro His Ala Ser 65 70 75 80

Ser Thr Thr Ser Thr Ser Arg Thr Ser Xaa Arg Ser Ala Ala Ser Ser 85 90 95

Thr Pro Thr Arg Arg Ser Ser Leu Thr Thr Pro Gly Pro Val Gly Ser 100 105 110

Ser Ser Gly Ser Ala Arg Thr Arg Thr Pro Ser Ser Gly Pro Ser Ser 115 120 125

Arg Gly 130

- (2) INFORMATION FOR SEQ ID NO:3573:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 103 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..103
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577381
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3573:

Ser His Pro Ala Leu Arg Gly Ala Gln Pro Gln Arg His Arg Pro Gly 1 5 10

Arg Ala Leu Gly Leu Ala Leu His Arg Arg Gly Pro Leu Leu His 20 25 30

Arg Leu Pro Pro Leu Gln Pro Val Trp Ile Arg Pro Pro Arg Pro Ala 35 40 45

His Gly His Arg Leu Pro Pro Leu Ala Arg Arg Thr Leu Pro Gln Gly 50 60

Arg Arg Gly Gly His Gly Arg Pro Gly Arg His Pro Thr His Leu 65 70 75 80

Arg Gln Pro Val Leu Arg Gly Pro Arg Xaa Ala Pro Arg Leu Pro Gln 85 90 95

Leu Arg Pro Asp Ala Leu Leu 100

- (2) INFORMATION FOR SEQ ID NO:3574:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 761 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..761
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577382
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3574:

catttctcgt gcaggtggtt gaggttaatg ttaaggtgga aagtgcaggc acacataaca tgcacaataa tgatttctat gctaaagaga agttgctcaa atcaatgcgt gattgtgatc

cttcgtcttt gcgccattgg attgtaagag ttgttttctt gttttatatt ttttttgtta ttcctaccat tgaattgggc attcaatacc tgtycattat ctttatgctt atgcaatcca 240 ataatgatgg aaaataactg acttggctgc tctcttgagt tgtggcaacC ggaagttcca 300 ggccccattg cagcacYtac actgcgctaa tggaccttca ggactattct gagaatggaa 360 ctgtaaccgt ggtatatcga gtgatactta aaggaactga tggagaggca tatagagatg 420 480 ccacgggcac aacacagttG ccatgagggg cgcagggaag atgctgttgc agccgcagag gaagetgeat teageaaage ttgegeatgg tteggttttg geetgtatet gtaceaceag 540 gatgaatctc attacgacga ccacttccat tgaggctcaa tctgcaaaag agttgatcat 600 aagttgtaac atgcgttgga tatgccccta gaaaattcgt atctagaatc aatttttggt 660 ctttgcgtag tatcatactc ataacacaaa gaagtgaacc tatgtagatg ctatttgaaa 720 ccddkttatt aatattataa ttcttattaa tattattgta t

- (2) INFORMATION FOR SEQ ID NO:3575:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 84 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..84
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577383
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3575:

Phe Leu Val Gln Val Val Glu Val Asn Val Lys Val Glu Ser Ala Gly
1 5 10 15

Thr His Asn Met His Asn Asn Asp Phe Tyr Ala Lys Glu Lys Leu Leu 20 25 30

Lys Ser Met Arg Asp Cys Asp Pro Ser Ser Leu Arg His Trp Ile Val 35 40 45

Arg Val Val Phe Leu Phe Tyr Ile Phe Phe Val Ile Pro Thr Ile Glu 50 55 60

Leu Gly Ile Gln Tyr Leu Xaa Ile Ile Phe Met Leu Met Gln Ser Asn 65 70 75 80

Asn Asp Gly Lys

- (2) INFORMATION FOR SEQ ID NO:3576:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 65 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..65
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577384
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3576:

Met His Asn Asn Asp Phe Tyr Ala Lys Glu Lys Leu Leu Lys Ser Met 1 5 10 15

Arg Asp Cys Asp Pro Ser Ser Leu Arg His Trp Ile Val Arg Val Val 20 25 30

Phe Leu Phe Tyr Ile Phe Phe Val Ile Pro Thr Ile Glu Leu Gly Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gln Tyr Leu Xaa Ile Ile Phe Met Leu Met Gln Ser Asn Asn Asp Gly 50 55 60

Lys 65

- (2) INFORMATION FOR SEQ ID NO:3577:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 62 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..62
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577385
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3577:

Met Arg Gly Ala Gly Lys Met Leu Leu Gln Pro Gln Arg Lys Leu His

1 10 15

Ser Ala Lys Leu Ala His Gly Ser Val Leu Ala Cys Ile Cys Thr Thr 20 25 30

Arg Met Asn Leu Ile Thr Thr Thr Thr Ser Ile Glu Ala Gln Ser Ala 35 40 45

Lys Glu Leu Ile Ile Ser Cys Asn Met Arg Trp Ile Cys Pro 50 60

- (2) INFORMATION FOR SEQ ID NO:3578:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 780 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..780
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577401
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3578:

gagetegetg egeogtettt caatgeteec eggeegeete eeegetataa ageacetgee 60 ttgccacctc tctctcctca cgaccacaca ccaccgctcc acacacaaga agagagccga 120 gagctagcta cctagcgcgc gatggcgatg tccgcttcca agatgatggc ggtcgccgcc 180 gctngccctg ctagccctgg tcctggccgc gtcgaccgcg naggcgagga acatcaagac 240 gacgacgacg acgacggaga agaaggacga tgcggtggtg bagccgcaga cettcccgcc 300 $\verb|cttcgamegc|| ctcggeggeg|| gNegcgtCec|| ceggegteeg|| gtggeeteec|| eggeaceteg||$ 360 tegggeggea geageattee agegtteage atgeegggea geggeageag ceteceegge 420 gggtcgttct tgcccggcag cagcggcagc atcggcagca tgcccctctt cagcggcggc 480 tecceggeet teageggett eggeggeatg eeegggteee negeeggegg eteegtetee 540 gtcgtccccg tgcacggcag caagccctga aaatccgtcc gtcgccggag cccggaagtc 600 tgtcgggcca acttgtgccc tagtactcct ttgcctgcat tgtattggag agttggtatc 660 gcgtttcgtt tggtgtttgc tttgttatta taggccgcct atctaccgag acatgtgatg 720 tttgttgcgg taaattaaaa tcggttgtat tcatgctgct gctgttgtct ttaatttgct 780

- (2) INFORMATION FOR SEQ ID NO:3579:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 142 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..142
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577402
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3579:

Met Ala Met Ser Ala Ser Lys Met Met Ala Val Ala Ala Ala Xaa Pro 1 10 15

Ala Ser Pro Gly Pro Gly Arg Val Asp Arg Xaa Gly Glu His Gln
20 25 30

Asp Asp Asp Asp Asp Gly Glu Glu Gly Arg Cys Gly Kaa Ala 35 40 45

Ala Asp Leu Pro Ala Leu Arg Xaa Pro Arg Arg Xaa Arg Pro Pro

55 Ala Ser Gly Gly Leu Pro Gly Thr Ser Ser Gly Gly Ser Ser Ile Pro 70 75 Ala Phe Ser Met Pro Gly Ser Gly Ser Ser Leu Pro Gly Gly Ser Phe 90 Leu Pro Gly Ser Ser Gly Ser Ile Gly Ser Met Pro Leu Phe Ser Gly 100 105 Gly Ser Pro Ala Phe Ser Gly Phe Gly Gly Met Pro Gly Ser Xaa Ala 120 Ala Gly Ser Val Ser Val Val Pro Val His Gly Ser Lys Pro 130 135 (2) INFORMATION FOR SEQ ID NO:3580: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 140 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..140 (D) OTHER INFORMATION: / Ceres Seq. ID 1577403 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3580: Met Ser Ala Ser Lys Met Met Ala Val Ala Ala Ala Xaa Pro Ala Ser 10 Pro Gly Pro Gly Arg Val Asp Arg Xaa Gly Glu His Gln Asp Asp 20 25 Asp Asp Asp Gly Glu Glu Gly Arg Cys Gly Gly Xaa Ala Ala Asp 40 Leu Pro Ala Leu Arg Xaa Pro Arg Arg Arg Xaa Arg Pro Pro Ala Ser 55 Gly Gly Leu Pro Gly Thr Ser Ser Gly Gly Ser Ser Ile Pro Ala Phe 70 75 Ser Met Pro Gly Ser Gly Ser Ser Leu Pro Gly Gly Ser Phe Leu Pro 85 90 Gly Ser Ser Gly Ser Ile Gly Ser Met Pro Leu Phe Ser Gly Gly Ser 105 100 Pro Ala Phe Ser Gly Phe Gly Gly Met Pro Gly Ser Xaa Ala Ala Gly 120 125 115 Ser Val Ser Val Val Pro Val His Gly Ser Lys Pro 130 135 (2) INFORMATION FOR SEQ ID NO:3581: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 135 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..135 (D) OTHER INFORMATION: / Ceres Seq. ID 1577404 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3581: Met Met Ala Val Ala Ala Ala Xaa Pro Ala Ser Pro Gly Pro Gly Arg 5 10 Val Asp Arg Xaa Gly Glu Glu His Gln Asp Asp Asp Asp Asp Gly 20 25 Glu Glu Gly Arg Cys Gly Gly Xaa Ala Ala Asp Leu Pro Ala Leu Arg 4.0 4.5 Xaa Pro Arg Arg Xaa Arg Pro Pro Ala Ser Gly Gly Leu Pro Gly

- (2) INFORMATION FOR SEQ ID NO:3582:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 837 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..837
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577405
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3582:

acceteteca etteegttte eggateeegt tteeagetee gateeaacee ageatetgta 60 ccgcgccgsc gagcacgtcc ggcgccggtq cqqcaqqcqa aatccqaqaq cactcctmcc 120 ccgctacgcc gcaccgccca tggccgcagc tagccgcaga tagagagagg cgcaggcgag 180 ggcgtgcaga tccagatccg gtgggcggga aggacttgat cgccccacc accatggccg 240 gcccggtgtc ggcgctcttc ctgctggaca tgaagggccg cgttctcgtc tgqcqcqact 300 accgcggcga tgtctccgcg ctccaggccg agcgcttctt caccaagctc ctcgacaagg 360 agggcgattc ggaagtgcac tcgcctgtgg tctacgacga cgctggcgtc acttacatgt 420 tcatccagca caacaatgtc ttcctcctca ccgccgctcg ccagaactgt aacqcgqCcc 480 agcatcctcc tcttcctcca ccgtgtaata gatgtgttta agcactactt cgaggagctg 540 gaggaggagt cgctcagaga taacttcgtc gttgtgtatg agttgctcga tgagatgatg 600 gattttgggt acccacaata cacggaggcg aagatattga gtgagttcat caagacagat 660 gcatacagga tggaggtcac acagcgtcca cccatggccg tgacaaatgc tgtgtcatgg 720 aggagcgagg ggatccggta caagaagaat gaagtcttct tggatgtagt ggagagtgtt aacattctag ttaacagcaa tggccagatt gtgagatcag atgtggttgg ggcactg

- (2) INFORMATION FOR SEQ ID NO:3583:
 - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 172 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..172
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577406
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3583:

Pro Leu His Phe Arg Phe Arg Ile Pro Phe Pro Ala Pro Ile Gln Pro 1 5 10 15 Ser Ile Cys Thr Ala Pro Xaa Ser Thr Ser Gly Ala Gly Ala Gly

20 25 30
Glu Ile Arg Glu His Ser Xaa Pro Ala Thr Pro His Arg Pro Trp Pro

Glu lle Arg Glu His Ser Xaa Pro Ala Thr Pro His Arg Pro Trp Pro 35 45

Gln Leu Ala Ala Asp Arg Glu Arg Arg Arg Gly Arg Ala Asp Pro
50 55 60

Asp Pro Val Gly Gly Lys Asp Leu Ile Ala Pro Thr Thr Met Ala Gly 65 70 75 80

Pro Val Ser Ala Leu Phe Leu Leu Asp Met Lys Gly Arg Val Leu Val 85 90 95 Trp Arg Asp Tyr Arg Gly Asp Val Ser Ala Leu Gln Ala Glu Arg Phe

Asn Val Phe Leu Leu Thr Ala Ala Arg Gln Asn Cys Asn Ala Ala Glr
145 150 155 160

His Pro Pro Leu Pro Pro Pro Cys Asn Arg Cys Val 165 170

- (2) INFORMATION FOR SEQ ID NO:3584:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 176 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..176
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577407
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3584:

Arg Arg Ala Ile Arg Lys Cys Thr Arg Leu Trp Ser Thr Thr Leu 20 25 30

Ala Ser Leu Thr Cys Ser Ser Ser Thr Thr Met Ser Ser Ser Pro $35 \\ 40 \\ 45$

Pro Leu Ala Arg Thr Val Thr Arg Pro Ser Ile Leu Leu Phe Leu His 50 55

Arg Val Ile Asp Val Phe Lys His Tyr Phe Glu Glu Leu Glu Glu 65 70 75 80

Ser Leu Arg Asp Asn Phe Val Val Val Tyr Glu Leu Leu Asp Glu Met 85 90 95

Met Asp Phe Gly Tyr Pro Gln Tyr Thr Glu Ala Lys Ile Leu Ser Glu
100 105 110

Phe Ile Lys Thr Asp Ala Tyr Arg Met Glu Val Thr Gln Arg Pro Pro
115 120 125

Met Ala Val Thr Asn Ala Val Ser Trp Arg Ser Glu Gly Ile Arg Tyr 130 135 140

Lys Lys Asn Glu Val Phe Leu Asp Val Val Glu Ser Val Asn Ile Leu 145 150 155 160

Val Asn Ser Asn Gly Gln Ile Val Arg Ser Asp Val Val Gly Ala Leu 165 170 175

- (2) INFORMATION FOR SEQ ID NO:3585:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 134 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..134
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577408
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3585:

Met Ser Ser Ser Pro Pro Leu Ala Arg Thr Val Thr Arg Pro Ser 1 5 10 15

Ile Leu Leu Phe Leu His Arg Val Ile Asp Val Phe Lys His Tyr Phe
20 25 30

```
Glu Glu Leu Glu Glu Glu Ser Leu Arg Asp Asn Phe Val Val Tyr 35 40 45
```

Glu Leu Leu Asp Glu Met Met Asp Phe Gly Tyr Pro Gln Tyr Thr Glu 50 55 60

Ala Lys Ile Leu Ser Glu Phe Ile Lys Thr Asp Ala Tyr Arg Met Glu 65 70 75 80

Val Thr Gln Arg Pro Pro Met Ala Val Thr Asn Ala Val Ser Trp Arg 85 90 95

Ser Glu Gly Ile Arg Tyr Lys Lys Asn Glu Val Phe Leu Asp Val Val 100 105 110

Glu Ser Val Asn Ile Leu Val Asn Ser Asn Gly Gln Ile Val Arg Ser 115 120 125

Asp Val Val Gly Ala Leu 130

- (2) INFORMATION FOR SEQ ID NO:3586:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 886 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..886
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577456
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3586:

aaaatttccc ccccaatttc cctccaccga agcatcaccc aatcagatcc gatttcgtag 60 agatgaagcc ggcagtagag gcggaggctg acgagcgagc ggcggaggag atggcaccta 120 agaaggcagc ggctgccaag aaagcngccg aggaagttga ggtggaggad gtggtggacg 180 gggacgaggc ggtcgatggg gagggcgacg gtgacgagga cgacgatggg gaaggcggtg 240 acgaggagga tgatgatgab gaggtggatg gggaggagaa ggangcggca ggggttgtqq 300 agateteega eGgaagaega egaegaeggt gaeggggakg eggaegaega egaegaegat 360 gacggggatg acgacgacga cgacgacgag gactcagacg acgaggaaga ggtcgacggt 420 gaagacgate aggaggagga getgggaace gagtatetgg tteagectet tgggeggget 480 gaagacgaag agcactcgag cgactttgaa ccggaagaaa acggtgaggg tgccgacgat 540 gaggagatcg atgaagagga cgatgacggt gaggactctg tgaaggcgca gacctctacg 600 aagaggaaga ggtcaggcga cgaagaagaa gaagacgacg acgatgggga tgatgatggt 660 gacgatgatg acgatgggag gccaccatca aagcgatagt atggttagct ctagttttgt 720 agctgtgtcc ttgggtgttt ggtaggtagg tagtgctgct gatgttggtt tagaagaact 780 catcatcacc tgggatatgt gtgtgatttg gcttggccga tggatgaatg atgaaggtct 840 tgtacttgtt gctgcttctt tcatgttgat gaactcgcac tgattc

- (2) INFORMATION FOR SEQ ID NO:3587:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 167 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..167
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577457
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3587:

Met Gly Arg Ala Thr Val Thr Arg Thr Thr Met Gly Lys Ala Val Thr 1

Arg Arg Met Met Met Xaa Arg Trp Met Gly Arg Arg Arg Xaa Arg Gln 20 25 30

Gly Leu Trp Arg Ser Pro Thr Glu Asp Asp Asp Gly Asp Gly Xaa 35 40 45

```
Glu Asp Ser Asp Asp Glu Glu Glu Val Asp Gly Glu Asp Asp Gln Glu 65 70 75 80
```

Glu Glu Leu Gly Thr Glu Tyr Leu Val Gln Pro Leu Gly Arg Ala Glu 85 90 95

Asp Glu Glu His Ser Ser Asp Phe Glu Pro Glu Glu Asn Gly Glu Gly
100 105 110

Ala Asp Asp Glu Glu Ile Asp Glu Glu Asp Asp Asp Gly Glu Asp Ser 115 120 125

Val Lys Ala Gln Thr Ser Thr Lys Arg Lys Arg Ser Gly Asp Glu Glu 130 135 140

Glu Glu Asp Asp Asp Asp Gly Asp Asp Gly Asp Asp Asp Asp Asp 145 150 155 160

Gly Arg Pro Pro Ser Lys Arg 165

- (2) INFORMATION FOR SEQ ID NO:3588:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 157 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..157
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577458
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3588:

Met Gly Lys Ala Val Thr Arg Arg Met Met Met Xaa Arg Trp Met Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Arg Arg Arg Xaa Arg Gln Gly Leu Trp Arg Ser Pro Thr Glu Asp Asp 20 25 30

Asp Asp Gly Asp Gly Xaa Ala Asp Asp Asp Asp Asp Asp Gly Asp 35 40 45

Asp Asp Asp Asp Asp Glu Asp Ser Asp Glu Glu Glu Val Asp 50 55 60
Gly Glu Asp Asp Gln Glu Glu Glu Leu Gly Thr Glu Tyr Leu Val Gln

65 70 75 80
Pro Leu Gly Arg Ala Glu Asp Glu Glu His Ser Ser Asp Phe Glu Pro

85 90 95
Glu Glu Asn Gly Glu Gly Ala Asp Asp Glu Glu Ile Asp Glu Glu Asp

100 105 110
Asp Asp Gly Glu Asp Ser Val Lys Ala Gln Thr Ser Thr Lys Arg Lys
115 120 125

Arg Ser Gly Asp Glu Glu Glu Glu Asp Asp Asp Gly Asp Asp Asp 130 135 140

Gly Asp Asp Asp Asp Gly Arg Pro Pro Ser Lys Arg 145 150 155

- (2) INFORMATION FOR SEQ ID NO:3589:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 149 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..149
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577459
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3589:

Met Met Met Xaa Arg Trp Met Gly Arg Arg Arg Xaa Arg Gln Gly Leu $1 \\ 5 \\ Trp Arg Ser Pro Thr Glu Asp Asp Asp Asp Gly Asp Gly Xaa Ala Asp$

```
20
                               25
                                                   30
Asp Asp Asp Asp Asp Gly Asp Asp Asp Asp Asp Asp Glu Asp
                           40
Ser Asp Asp Glu Glu Glu Val Asp Gly Glu Asp Asp Gln Glu Glu
                       55
Leu Gly Thr Glu Tyr Leu Val Gln Pro Leu Gly Arg Ala Glu Asp Glu
                   70
Glu His Ser Ser Asp Phe Glu Pro Glu Glu Asn Gly Glu Gly Ala Asp
                                   90
Asp Glu Glu Ile Asp Glu Glu Asp Asp Asp Gly Glu Asp Ser Val Lys
           100
                               105
                                                   110
Ala Gln Thr Ser Thr Lys Arg Lys Arg Ser Gly Asp Glu Glu Glu
                           120
                                               125
Asp Asp Asp Gly Asp Asp Gly Asp Asp Asp Asp Asp Gly Arg
                       135
                                          140
Pro Pro Ser Lys Arg
145
(2) INFORMATION FOR SEQ ID NO:3590:
```

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 620 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..620
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577480
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3590:

accggacage tececacaaa accgteagtt etettteee etgtaaateg caaattegte 60 ttccctgccc atctatcgct tggacacctc tgcaagggag cacatggctc tcgagaaggc 120 caaggagate ategegteet ecceggtega ectagetete egaaaggeea aggagaceqt 180 cgcctcccac cccgtcgtcg tcttcagcaa aacttactgc cctttctgca cccgaqtgaa 240 acaattgcta gcaaagttgg gggcaagtta caaggctatt gagttKggat gtggaaagtg 300 atggcgctga gctgcagtca gctctcgctg aatggactgg ccagagaact gttcccaatq 360 tottogtgaa aggggagogg attggtggct gtgacgcaac catggcaatg cacgacggtg 420 aagctGggtg cctctgctca ccgaggctgg agcaattgtc actgccaggg ctactgcaac 480 tactaccact ccgtctttKg tagacatgtt ttacagcgct gttccgctcg cttcgtggct 540 atatgcaaat qcaagtgttg tacggagtac taaactcata cgtggcaaaa gatgaataaa gacttaaaca tttcttcgcc

- (2) INFORMATION FOR SEQ ID NO:3591:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 93 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..93
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577481
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3591:

Arg Lys Phe Val Phe Pro Ala His Leu Ser Leu Gly His Leu Cys Lys
20 25 30

Gly Ala His Gly Ser Arg Glu Gly Gln Gly Asp His Arg Val Leu Pro 35 40 45

Gly Arg Pro Ser Ser Pro Lys Gly Gln Gly Asp Arg Arg Leu Pro Pro 50 55 60 Arg Arg Leu Gln Gln Asn Leu Leu Pro Phe Leu His Pro Ser Glu

120

180

65 70 75 80 Thr Ile Ala Ser Lys Val Gly Gly Lys Leu Gln Gly Tyr 85 (2) INFORMATION FOR SEQ ID NO:3592: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 50 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..50 (D) OTHER INFORMATION: / Ceres Seq. ID 1577482 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3592: Arg Thr Ala Pro His Lys Thr Val Ser Ser Leu Phe Pro Cys Lys Ser 10 Gln Ile Arg Leu Pro Cys Pro Ser Ile Ala Trp Thr Pro Leu Gln Gly 2.0 25 Ser Thr Trp Leu Ser Arg Arg Pro Arg Arg Ser Ser Arg Pro Pro Arg 40 Ser Thr 50 (2) INFORMATION FOR SEQ ID NO:3593: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 65 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..65 (D) OTHER INFORMATION: / Ceres Seq. ID 1577483 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3593: Met Ala Leu Glu Lys Ala Lys Glu Ile Ile Ala Ser Ser Pro Val Asp 10 Leu Ala Leu Arg Lys Ala Lys Glu Thr Val Ala Ser His Pro Val Val 20 25 Val Phe Ser Lys Thr Tyr Cys Pro Phe Cys Thr Arg Val Lys Gln Leu 40 Leu Ala Lys Leu Gly Ala Ser Tyr Lys Ala Ile Glu Xaa Gly Cys Gly Lys 65 (2) INFORMATION FOR SEQ ID NO:3594: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 923 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..923 (D) OTHER INFORMATION: / Ceres Seq. ID 1577488 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3594: tgagtatcar gaggcactac agtggaggat gcgggagcca aatttgggtg caaagctctt ccttggtggt gttggagtgc agaagacagg tgaggagatt gcgactgcac tgaacaacat tgacattagc tctgagtatg ttctgaagct ccgtcatgag attgaggagc tctgcgtgga ggtttttcat actccagctg atcgagagaa gatcaagtcc tgtttatcag agctaggaga

```
ggtcagtgct tcatttaaga agatccttca ttctgcactg gagcatttgg tggcatctgt
                                                                       300
ggtaccacgc attcqtccag tccttqacac tqttqctact qtcaqttatq aqttqqatqa
                                                                       360
tactgaatat ggggaaaatg aggtgaacga tccatgggtg cagaagctta tacttacagt
                                                                       420
waacagtaat gttgcttggc tccagccagt tatgacatta aacaactacg attcctttgt
                                                                       480
gcacttgatc attgacttca ttgtcaagag gctcgaggtg attatgatgc agaagaggtt
                                                                       540
cagccagctc ggcgggctcc agctcgataa ggaggtccgc tctctgatca accatttctc
                                                                       600
agagatgtCc cagagaccag tcagagacaa gttctctagg ctttcgcaga tgtcgaccat
                                                                       660
tttgaacttc gagcgggtat cggagatatt ggatttctgg ggtgacaatg ctggccatct
                                                                       720
gacgtggctg ttgacacctg cagaggtgcg gagagtgtta ggacttagga ttgacttcag
                                                                       780
gcctgaagct attgctgctt tgaggctctg aatcgtgcat ttatttgtac ttgttaattc
                                                                       840
attatatgtg atatatagca acgagatgcc ttagaaattt ttgttgtaat gacgaaagac
                                                                       900
ctgcattgta gaagaaatct gcg
```

- (2) INFORMATION FOR SEQ ID NO:3595:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 269 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..269
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577489
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3595:

Val Ser Ala Ser Phe Lys Lys Ile Leu His Ser Ala Leu Glu His Leu 85 90 95

Val Ala Ser Val Val Pro Arg Ile Arg Pro Val Leu Asp Thr Val Ala
100 105 110

Thr Val Ser Tyr Glu Leu Asp Asp Thr Glu Tyr Gly Glu Asn Glu Val 115 120 125

Asn Asp Pro Trp Val Gln Lys Leu Ile Leu Thr Xaa Asn Ser Asn Val
130
135
140

Ala Trp Leu Gln Pro Val Met Thr Leu Asn Asn Tyr Asp Ser Phe Val 145 150 155 160

His Leu Ile Ile Asp Phe Ile Val Lys Arg Leu Glu Val Ile Met Met

165 170 175

Cla Lys Arg Phe Ser Cla Leu Cly Cly Leu Cla Leu Arg Lys Cly Val

Gln Lys Arg Phe Ser Gln Leu Gly Gly Leu Gln Leu Asp Lys Glu Val
180
185
190

Arg Ser Leu Ile Asn His Phe Ser Glu Met Ser Gln Arg Pro Val Arg 195 200 205

Asp Lys Phe Ser Arg Leu Ser Gln Met Ser Thr Ile Leu Asn Phe Glu 210 220

Arg Val Ser Glu Ile Leu Asp Phe Trp Gly Asp Asn Ala Gly His Leu 225 230 235 240

Thr Trp Leu Leu Thr Pro Ala Glu Val Arg Arg Val Leu Gly Leu Arg 245 250 255

- Ile Asp Phe Arg Pro Glu Ala Ile Ala Ala Leu Arg Leu 260 265
- (2) INFORMATION FOR SEQ ID NO:3596:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 260 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..260
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577490
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3596:
- Met Arg Glu Pro Asn Leu Gly Ala Lys Leu Phe Leu Gly Gly Val Gly 1 5 10 15
- Val Gln Lys Thr Gly Glu Glu Ile Ala Thr Ala Leu Asn Asn Ile Asp 20 25 30
- Ile Ser Ser Glu Tyr Val Leu Lys Leu Arg His Glu Ile Glu Glu Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$
- Cys Val Glu Val Phe His Thr Pro Ala Asp Arg Glu Lys Ile Lys Ser 50 60
- Cys Leu Ser Glu Leu Gly Glu Val Ser Ala Ser Phe Lys Lys Ile Leu 65 70 75 80
- His Ser Ala Leu Glu His Leu Val Ala Ser Val Val Pro Arg Ile Arg 85 90 95
- Pro Val Leu Asp Thr Val Ala Thr Val Ser Tyr Glu Leu Asp Asp Thr 100 105 110
- Glu Tyr Gly Glu Asn Glu Val Asn Asp Pro Trp Val Gln Lys Leu Ile 115 120 125
- Leu Thr Xaa Asn Ser Asn Val Ala Trp Leu Gln Pro Val Met Thr Leu 130 135 140
- Asn Asn Tyr Asp Ser Phe Val His Leu Ile Ile Asp Phe Ile Val Lys 145 150 155 160
- Arg Leu Glu Val Ile Met Met Gln Lys Arg Phe Ser Gln Leu Gly Gly
 165 170 175
- Leu Gln Leu Asp Lys Glu Val Arg Ser Leu Ile Asn His Phe Ser Glu
 180 185 190
- Met Ser Gln Arg Pro Val Arg Asp Lys Phe Ser Arg Leu Ser Gln Met 195 200 205
- Ser Thr Ile Leu Asn Phe Glu Arg Val Ser Glu Ile Leu Asp Phe Trp 210 215 220
- Gly Asp Asn Ala Gly His Leu Thr Trp Leu Leu Thr Pro Ala Glu Val 225 230 235 240
- Arg Arg Val Leu Gly Leu Arg Ile Asp Phe Arg Pro Glu Ala Ile Ala 245 250 255

Ala Leu Arg Leu

- (2) INFORMATION FOR SEQ ID NO:3597:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 760 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..760
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577513
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3597:

accaaagcct	ccrccccctt	ccctgacacc	ctcgccgccg	cgcacgcacg	cacgaaccag	60
cgaagagatg	ggcgtctaca	ccttcgtgtg	ccgcarcrcc	ggcggsgcga	ngtggaccgc	120
caagcagcac	tccggcgaga	tggaggcctc	cgccgccacc	ccctacgagc	tgcagcgccg	180
cctcgtcgcc	gCcgcctccg	cGgccgactc	cgcgtccggc	gtccagtcgt	ccttctCcca	240
tggtcacccc	caGctccgcc	gtcttccagg	tgatcgtcgg	tggtggcgcg	atgatggtta	300
ataGAnacaa	caCacaacaa	tGcqqccqAy	ngccqCdkcq	aktaNacact	gcggccgaag	360

- (2) INFORMATION FOR SEQ ID NO:3598:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 90 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..90
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577514
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3598:

Thr Lys Ala Ser Xaa Pro Phe Pro Asp Thr Leu Ala Ala Ala His Ala 1 5 10 15

Arg Thr Asn Gln Arg Arg Asp Gly Arg Leu His Leu Arg Val Pro Xaa 20 25 30

Xaa Arg Arg Xaa Xaa Val Asp Arg Gln Ala Ala Leu Arg Arg Asp Gly
35 40 45

Gly Leu Arg Arg His Pro Leu Arg Ala Ala Pro Pro Arg Arg 50 55 60

Arg Leu Arg Gly Arg Leu Arg Val Arg Arg Pro Val Val Leu Leu Pro 65 70 75 80

Trp Ser Pro Pro Ala Pro Pro Ser Ser Arg 85 90

- (2) INFORMATION FOR SEQ ID NO:3599:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 99 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..99
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577515
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3599:

Pro Lys Pro Xaa Pro Pro Ser Leu Thr Pro Ser Pro Pro Arg Thr His 1 5 10 15

Ala Arg Thr Ser Glu Glu Met Gly Val Tyr Thr Phe Val Cys Arg Xaa 20 25 30

Xaa Gly Xaa Ala Xaa Trp Thr Ala Lys Gln His Ser Gly Glu Met Glu 35 40 45

Ala Ser Ala Ala Thr Pro Tyr Glu Leu Gln Arg Arg Leu Val Ala Ala 50 55 60

Ala Ser Ala Ala Asp Ser Ala Ser Gly Val Gln Ser Ser Phe Ser His 65 70 75 80

Gly His Pro Gln Leu Arg Arg Leu Pro Gly Asp Arg Arg Trp Trp Arg
85 90 95

Asp Asp Gly

- (2) INFORMATION FOR SEQ ID NO:3600:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 82 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..82
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577516
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3600:

Met Val Thr Pro Ser Ser Ala Val Phe Gln Val Ile Val Gly Gly 1 5 10 15

Ala Met Met Val Ser Gly Xaa Gly Ala Arg Arg Cys Gly Arg Xaa Pro $20 \hspace{1cm} 25 \hspace{1cm} 30$

Xaa Arg Xaa Xaa Ala Ala Ala Glu Ala Pro Lys Gly Glu Glu Gly 35 40 45

Arg Gly Glu Gly Arg Glu Arg Arg Arg His Gly Ile Leu Pro Val Arg 50 55 60

Leu Glu Leu Ser Cys Val Cys Met Val Ala Val Arg Val Val Ser Arg 65 70 75 80 Glu Thr

- (2) INFORMATION FOR SEQ ID NO:3601:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1006 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1006
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577517
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3601:

ctagggttta catcccttat aaaatctcgt cttccacccc tgcctccctc agtcgcactt 60 cctccggcgg cggcaactcg acggccaacc gcgccaccct gccgcggcag ccatggtgca 120 tgttaacttc taccgcaact atgggaagac tttcaagaag ccaaggcggc cgtatgagaa 180 ggagcgccta gatgctgagc tgaagctggt tggtgagtat ggcctgcggt gcaagcgcga 240 gctgtggcgc gtgcagtatg ccctgagccg tatcaggaat gcagccaggg agctgctcac 300 cctggatgag aagaacccac gccgtatctt tgagggegag gcgctcctcc gccgcatgaa 360 cagatatggt cttcttggtg agggacagaa caagcttgat tacgtgcttg ctctcactgt 420 tgagaacttc ctccagcgcc gcctccagac catcgtcttc aagaatggca tggccaagtc 480 catccaccat gctcgtgtcc tgatcaggca gcgcCacatc agggtgggaa ggcagctcgt 540 caacatcccc tegttcatgg tcagggtcga atcagagaag cacatcgact tctccctcac 600 cagocototg ggtggtggtc ctgccggaag ggtgaagcgg aagaaccaga agaaggcctc 660 agggggcggc gacgctgagg aggacgagga gtaaaggggg ggggggcacg taggattctg 720 ggacggcaat tggtttaaat gtgaggtgga cactttagtt gttgtgcctg agtgtgtttg 780 tgttgtaatg aatacaaatt ctactgtggt agacaatttt gcacccccac tactgacact 840 cgtgtttaaa tttaaacatt ggcatcgtgt ctggacacga tgaattgtat tctggtttgg 900 gtggctattt gctagtttgg tctttaggcc aatgtttaag actgaaacaa attggtagcc 960 aactttacta tcttatgctc tgctggtctg tttggtgatt tttttt

- (2) INFORMATION FOR SEQ ID NO:3602:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 193 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..193
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577518
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3602:

Met Val His Val Asn Phe Tyr Arg Asn Tyr Gly Lys Thr Phe Lys Lys 10 Pro Arg Arg Pro Tyr Glu Lys Glu Arg Leu Asp Ala Glu Leu Lys Leu Val Gly Glu Tyr Gly Leu Arg Cys Lys Arg Glu Leu Trp Arg Val Gln 40 Tyr Ala Leu Ser Arg Ile Arg Asn Ala Ala Arg Glu Leu Leu Thr Leu 55 Asp Glu Lys Asn Pro Arg Arg Ile Phe Glu Gly Glu Ala Leu Leu Arg 7.0 75 Arg Met Asn Arg Tyr Gly Leu Leu Gly Glu Gly Gln Asn Lys Leu Asp 90 Tyr Val Leu Ala Leu Thr Val Glu Asn Phe Leu Gln Arg Arg Leu Gln 100 105 Thr Ile Val Phe Lys Asn Gly Met Ala Lys Ser Ile His His Ala Arg 120 Val Leu Ile Arg Gln Arg His Ile Arg Val Gly Arg Gln Leu Val Asn 135 Ile Pro Ser Phe Met Val Arg Val Glu Ser Glu Lys His Ile Asp Phe 150 155 Ser Leu Thr Ser Pro Leu Gly Gly Gly Pro Ala Gly Arg Val Lys Arg 165 170 Lys Asn Gln Lys Lys Ala Ser Gly Gly Gly Asp Ala Glu Glu Asp Glu 180 185 Glu

- (2) INFORMATION FOR SEQ ID NO:3603:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 112 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..112
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577519
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3603:

Met Asn Arg Tyr Gly Leu Leu Gly Glu Gly Gln Asn Lys Leu Asp Tyr 1 5 10 15

Val Leu Ala Leu Thr Val Glu Asn Phe Leu Gln Arg Arg Leu Gln Thr
20 25 30

Ile Val Phe Lys Asn Gly Met Ala Lys Ser Ile His His Ala Arg Val 35 40 45

Leu Ile Arg Gln Arg His Ile Arg Val Gly Arg Gln Leu Val Asn Ile
50 55 60

Pro Ser Phe Met Val Arg Val Glu Ser Glu Lys His Ile Asp Phe Ser 65 70 75 80

Leu Thr Ser Pro Leu Gly Gly Gly Pro Ala Gly Arg Val Lys Arg Lys 85 90 95

Asn Gln Lys Lys Ala Ser Gly Gly Gly Asp Ala Glu Glu Asp Glu Glu 100 105 110

- (2) INFORMATION FOR SEQ ID NO: 3604:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 851 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)

- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..851
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577526
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3604:

aagageteee cacetegeee ecceecatee ageteegace etagggttte cateeggete 60 ttccggaage ttccgaaaat ggccaccgac gagetegeee acgeegtege ceeegeeeeg 120 gccgggggag accactcccc ggccttctcg ttcagcatct ggccgccgac gcagcgcacq 180 cggngacgsg ntggtgcggc gcctcgtgga gacgctcgcg ggagacacca tcctctgcaa 240 gegetaeggt geggtgeegg cegeegaege egageeegeg gegegeea tegaggeega 300 ggccttcgac gccgcggcct ccacgggagg cgccqccqcc gcctccgtqg aggaggggat 360 cgaggcgctg cagttcCtac tccaaggagg tgagccgccg cctcctyvqc ttcgtcaagt 420 yecGeteege ggacgeeaag geeggtgaca egeegtegga ggaggeeegg geeeetggeg 480 cgcccqaggc cqaggccqcc caqcccqcqq cqtqaqcqcc qdacaqccat tcqttccqtt 540 ttgtatttcc tgcagcctgt gtttggcttg ggtctgagtt tgtatgactt gaacgttagc tgtttgcaca tctatgcaat tcttgttctt ccatgaatag ccccgttcta gtgcgtgttc 660 ctgtttttct gggaatccct gcccgatcct gaggttgtca aaccatcgca gcattgacct 720 ctgtctgtgt gcagcttcga gtgatggtcg aattgttccg gagaccgaat tgacaagcaa 780 ttaagattcc tcccatcttt caagccacat ttatatgtat aataataatc tgaccgttga tttgaaattc t

- (2) INFORMATION FOR SEQ ID NO:3605:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 130 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..130
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577527
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3605:

Lys Ser Ser Pro Pro Arg Pro Pro Pro Ser Ser Ser Asp Pro Arg Val 1 5 10 15

Ser Ile Arg Leu Phe Arg Lys Leu Pro Lys Met Ala Thr Asp Glu Leu 20 25 30

Ala His Ala Val Ala Pro Ala Pro Ala Gly Gly Asp His Ser Pro Ala 35 40 45

Phe Ser Phe Ser Ile Trp Pro Pro Thr Gln Arg Thr Arg Xaa Xaa Xaa 50 55 60

Gly Ala Ala Pro Arg Gly Asp Ala Arg Gly Arg His His Pro Leu Gln 65 70 75 80

Ala Leu Arg Cys Gly Ala Gly Arg Arg Arg Arg Ala Arg Gly Ala Arg
85 90 95

His Arg Gly Arg Gly Leu Arg Arg Gly Leu His Gly Arg Arg Arg 100 105 110

Arg Arg Leu Arg Gly Gly Gly Asp Arg Gly Ala Ala Val Pro Thr Pro 115 120 125

Arg Arg

- (2) INFORMATION FOR SEQ ID NO:3606:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 148 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..148
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577528

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3606: Arg Ala Pro His Leu Ala Pro Pro His Pro Ala Pro Thr Leu Gly Phe 10 Pro Ser Gly Ser Ser Gly Ser Phe Arg Lys Trp Pro Pro Thr Ser Ser 2.5 Pro Thr Pro Ser Pro Pro Pro Arg Pro Gly Glu Thr Thr Pro Arg Pro 40 Ser Arg Ser Ala Ser Gly Arg Arg Ser Ala Arg Xaa Asp Xaa Xaa 55 Val Arg Arg Leu Val Glu Thr Leu Ala Gly Asp Thr Ile Leu Cys Lys 70 75 Arg Tyr Gly Ala Val Pro Ala Ala Asp Ala Glu Pro Ala Ala Arg Ala 90 Ile Glu Ala Glu Ala Phe Asp Ala Ala Ser Thr Gly Gly Ala Ala 105 Ala Ala Ser Val Glu Glu Gly Ile Glu Ala Leu Gln Phe Leu Leu Gln 115 120 125 Gly Gly Glu Pro Pro Pro Yaa Leu Arg Gln Xaa Pro Leu Arg Gly 135 Arg Gln Gly Arg 145 (2) INFORMATION FOR SEQ ID NO:3607: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 104 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..104 (D) OTHER INFORMATION: / Ceres Seq. ID 1577529 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3607: Met Ala Thr Asp Glu Leu Ala His Ala Val Ala Pro Ala Pro Ala Gly 5 10 Gly Asp His Ser Pro Ala Phe Ser Phe Ser Ile Trp Pro Pro Thr Gln 20 25 Arg Thr Arg Xaa Xaa Xaa Gly Ala Ala Pro Arg Gly Asp Ala Arg Gly 40 45 Arg His His Pro Leu Gln Ala Leu Arg Cys Gly Ala Gly Arg Arg Arg 55 60 Arg Ala Arg Gly Ala Arg His Arg Gly Arg Gly Leu Arg Arg Gly 70 75 Leu His Gly Arg Arg Arg Arg Leu Arg Gly Gly Asp Arg Gly 85 90 Ala Ala Val Pro Thr Pro Arg Arg 100 (2) INFORMATION FOR SEQ ID NO:3608: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 842 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..842

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3608: agtgttgtgt cctagcgcc ccgccgccc aactcgcctt gcgtgactga aagctcgtcg

(D) OTHER INFORMATION: / Ceres Seq. ID 1577539

getteegtee acgegagaag egagageatg gacacccagg tgaagettge tgttgtgqtg

aaggtgatgg gcaggaccgg ctccaggggt caggtgaccc aggtcagagt taagttcttq 180 gatgaccaga accggctcat catgaggaat gtcaaggcac ttgctcaccc ttgacgagaa 240 gaacccccgt cgtatctttg agggtgaggc gcttcttcgc cgcatgaacc gctatgggct 300 gcttgctgag ggtcagaaca agcttgatta tgttcttgcc ctcaccgctg agaacttcct 360 cgcaaggcgg cttcaaacac ttgtcttcaa ggctggcatg gccaagtcca ttcaccatgc 420 tegtgtettg ateaageage gteacateag ggttggeagg caaattgtea aegteecate 480 attcatggtg agggtggagt ctgagaagca cattgacttt tcactgtcaa gcccattcgg 540 tggaggcccc gcaGgaaggg tgaagagaaa qaatcagaag aaggcaagcg gtggcgga 600 tgctggcgat gaggatgagg agtgaggatg gacaagtagc gttacccaat ataataatat 660 tatctagttt tcttgaactt gttcgaatga tgagtgctta gctgtgtgat ctgacgcaga 720 gttccctgtg ctgactctgt gtcatggatg gtccatttta tcttgtggta ttatcagcct 780 ttacataact gctatgtttg gatatgttca attctgttgc aattttatgt ggttgttttt 840

- (2) INFORMATION FOR SEQ ID NO: 3609:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 138 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..138
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577540
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3609:

Met Ser Arg His Leu Leu Thr Leu Asp Glu Lys Asn Pro Arg Arg Ile

5 10 15

Phe Glu Gly Glu Ala Leu Leu Arg Arg Met Asn Arg Tyr Gly Leu Leu 20 25 30

Ala Glu Gly Gln Asn Lys Leu Asp Tyr Val Leu Ala Leu Thr Ala Glu
35 40 45

Asn Phe Leu Ala Arg Arg Leu Gln Thr Leu Val Phe Lys Ala Gly Met 50 60

Ala Lys Ser Ile His His Ala Arg Val Leu Ile Lys Gln Arg His Ile 65 70 75 80

Arg Val Gly Arg Gln Ile Val Asn Val Pro Ser Phe Met Val Arg Val 85 90 95

Glu Ser Glu Lys His Ile Asp Phe Ser Leu Ser Ser Pro Phe Gly Gly
100 105 110

Gly Pro Ala Gly Arg Val Lys Arg Lys Asn Gln Lys Lys Ala Ser Gly 115 120 125

- Gly Gly Asp Ala Gly Asp Glu Asp Glu Glu 130 135
- (2) INFORMATION FOR SEQ ID NO:3610:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 113 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..113
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577541
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3610:

Met Asn Arg Tyr Gly Leu Leu Ala Glu Gly Gln Asn Lys Leu Asp Tyr 1 5 10 15

Val Leu Ala Leu Thr Ala Glu Asn Phe Leu Ala Arg Arg Leu Gln Thr 20 25 30

Leu Val Phe Lys Ala Gly Met Ala Lys Ser Ile His His Ala Arg Val

```
      Leu Ile Lys Gln Arg
      His Ile Arg
      Val Gly Arg
      Gln Ile Val Asn
      Val Asn
      Val 55

      Pro Ser Phe Met Val Arg
      Val Glu Ser Glu Lys His Ile Asp
      Phe Ser 80

      Leu Ser Ser Pro Phe Gly Gly Gly Pro Ala Gly Arg
      Val Lys Arg
      Val Lys Arg

      Asn Gln Lys Lys Ala Ser Gly Gly Gly Gly Asp
      Ala Gly Asp
      Glu Asp

      Glu
      Glu
      Gly Arg
      Gly Asp
```

- (2) INFORMATION FOR SEQ ID NO:3611:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 75 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..75
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577542
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3611:

Val Glu Ser Glu Lys His Ile Asp Phe Ser Leu Ser Ser Pro Phe Gly
35 40 45

Gly Gly Pro Ala Gly Arg Val Lys Arg Lys Asn Gln Lys Lys Ala Ser 50 55 60

Gly Gly Gly Asp Ala Gly Asp Glu Asp Glu Glu 65 70 75

- (2) INFORMATION FOR SEQ ID NO:3612:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 569 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..569
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577548
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3612:

aaaacagaca ggaagcccgc cgaacatcac aaggetgcga acctectaga agetegagga 60 gatgetetee aagetgtegg egtggttegt gaaceegegg aggaatyegb tegegegtet 120 180 ccaccggaac gccgtcgcct cccgcctccg caaatacggg ctcaggtatg acgacctcta cgacccgtac cacgacctag acatcaagga ggcgCtggcg cggctgccgc gggaggtggt 240 300 ggacgcccgt aaccagcgcc tcaagcgggc catggacctc tccatgaagc accagtacct accegacgae gtecaggeta tacagacgee atteaggage tacetttttg acatgettge 360 tettgtgaaa aaggagageg cagagegtga ageattggga gegetteeac tetaccagag 420 aaccatccca taaagtgcct ctttgcatga tccaatcaat agtgcacgcg atgatcagca 480 gaggetgata etgtaatgtg tattgtgttt tttegaggaa atetetaeta ettattaaga cgataagggt agcctgccgt tctgacgtc

- (2) INFORMATION FOR SEQ ID NO:3613:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 123 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..123
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577549
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3613:
- Met Leu Ser Lys Leu Ser Ala Trp Phe Val Asn Pro Arg Arg Asn Xaa 1 5 10 15
- Xaa Ala Arg Leu His Arg Asn Ala Val Ala Ser Arg Leu Arg Lys Tyr
 20 25 30
- Gly Leu Arg Tyr Asp Asp Leu Tyr Asp Pro Tyr His Asp Leu Asp Ile
 35 40 45
- Lys Glu Ala Leu Ala Arg Leu Pro Arg Glu Val Val Asp Ala Arg Asn 50 55 60
- Gln Arg Leu Lys Arg Ala Met Asp Leu Ser Met Lys His Gln Tyr Leu 65 70 75 80
- Pro Asp Asp Val Gln Ala Ile Gln Thr Pro Phe Arg Ser Tyr Leu Phe
 85 90 95
- Asp Met Leu Ala Leu Val Lys Lys Glu Ser Ala Glu Arg Glu Ala Leu 100 105 110
- Gly Ala Leu Pro Leu Tyr Gln Arg Thr Ile Pro 115 120
- (2) INFORMATION FOR SEQ ID NO: 3614:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 704 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..704
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577550
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3614:
- gtgctttett agaggtgggt tggcttctcc tccccctccg gttcgggttc gggttcgtga 60 ggttctccgg ggttcggttt cgtgggtgav cggatcgaga tggcggcgtc ggatgttgag 120 taccgctgct tcgtcggcag ctacagcvgt ggcggcggcg gctacggtgg cggcggccc 180 accacttgct cgccttcgcc ccttctgtct cccttcgtcc gtagcagacc aggaacgccc 240 aaggcgctaG cgtctccaag atggtgctgc aaaacgacat tgacttactc aatccaccgg 300 cagagettga gaagetaaag cacaagaaga ageggetagt ccagteecce aacteettet 360 tcatggatgt caagtgccag ggctgtttca gcataaccac tgtgttcagc cactcccaga 420 ctgtggttgt gtgcccaggc tgccaaactg ttctgtgcca acctaccggt gggaaggcca 480 ggctcaccga ggggtgctcc ttccgtcgca agggcgatta ggtCctgctt ctcttaacgt 540 gagaagagat aaatttggtg ttttgcaact ttctcaggat atgtactgta ctcggtgagg 600 attttgttaa ttattatggc tgttagcgtg gcctgacaat gcttgtgtgt maacctgcac 660 tttgtttgag cgtagtgaca tctaatatgg tgctgtttgg cttt
- (2) INFORMATION FOR SEQ ID NO: 3615:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 82 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..82
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577551
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3615:
- Cys Phe Leu Arg Gly Gly Leu Ala Ser Pro Pro Pro Pro Val Arg Val 1 5 10 15
- Arg Val Arg Glu Val Leu Arg Gly Ser Val Ser Trp Val Xaa Gly Ser

Arg Trp Arg Arg Met Leu Ser Thr Ala Ala Ser Ser Ala Ala Thr 35 40 45

Xaa Val Ala Ala Ala Ala Thr Val Ala Ala Pro Pro Leu Ala Arg 50 55 60

Leu Arg Pro Phe Cys Leu Pro Ser Ser Val Ala Asp Gln Glu Arg Pro 65 70 75 80

Arg Arg

- (2) INFORMATION FOR SEQ ID NO:3616:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 72 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..72
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577552

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3616:

Met Ala Ala Ser Asp Val Glu Tyr Arg Cys Phe Val Gly Ser Tyr Ser 1 5 10 15

Xaa Gly Gly Gly Tyr Gly Gly Gly Gly Ala Thr Thr Cys Ser Pro 20 25 30

Ser Pro Leu Leu Ser Pro Phe Val Arg Ser Arg Pro Gly Thr Pro Lys 35 40 45

Ala Leu Ala Ser Pro Arg Trp Cys Cys Lys Thr Thr Leu Thr Tyr Ser 50 55 60

Ile His Arg Gln Ser Leu Arg Ser

5 70

- (2) INFORMATION FOR SEQ ID NO:3617:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 86 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..86
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577553
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3617:

Met Val Leu Gln Asn Asp Ile Asp Leu Leu Asn Pro Pro Ala Glu Leu 1 5 10 15

Glu Lys Leu Lys His Lys Lys Lys Arg Leu Val Gln Ser Pro Asn Ser 20 25 30

Phe Phe Met Asp Val Lys Cys Gln Gly Cys Phe Ser Ile Thr Thr Val

Phe Ser His Ser Gln Thr Val Val Cys Pro Gly Cys Gln Thr Val 50 60

Leu Cys Gln Pro Thr Gly Gly Lys Ala Arg Leu Thr Glu Gly Cys Ser 65 70 75 80

Phe Arg Arg Lys Gly Asp

85

- (2) INFORMATION FOR SEQ ID NO:3618:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 941 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)

(ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..941
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577582
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3618:

aggccagggc	acttgcaaag	gatttatcct	cccaaagagc	aacgagagat	agggattttg	60
cttttgcatg	gttcattggt	ttgcggcgtc	aaagagctcg	ttaaatatgg	acgtnctgga	120
tcactcggac	gatgaggagg	agcagcagga	ccggtgcggc	accagcagcg	gcagatcagg	180
ctccaggctc	ggcgcgcggg	csggcggcag	aagcggaggt	caggcggcag	cgccagaacc	240
tgctgctcat	ggactgcgtc	ggcggcaacg	gcggcgacgg	ggacggcgcg	ttggaggaca	300
ccgcgccgct	gccagactac	gagctcttgt	cccagtccgc	ccgcctccac	gacgacgcca	360
agaatccgcc	tccggcgctg	ctggttgcag	avgaggagga	gcagcagaag	gcgccggcca	420
agcaggggaa	gGcgtccccg	ccacagcctc	cgcccgtgcc	actgccacag	cggcagcaga	480
agccggcgtg	gaggctgatc	gagtacgtga	ggtcaaggaa	cagktcgggc	ggcgcagggc	540
cgggggtcgg	tgggtgcggc	gcctggtctg	acggcgactc	caagagctcc	gaggacggcg	600
aggacggggg	cggcgaaggg	aagaaagata	agaagaagaa	gcggtcgtcc	tggctgccgg	660
accccgaccg	ccggtggccg	gtgcagggat	tctactagcg	cgttcatcgt	cttcgcagtc	720
tagtaaaacc	gtgttagtca	tgatgcgcct	ctgactcatg	cgttggtttg	gttgctccgg	780
gccctgtttg	gaagtgaagt	ttttttcata	gtttttgaga	aatactatag	tatccgttaa	840
tattagagta	ttctggacta	ttaatagatt	attagaaaat	agagtttcta	atatcatggt	900
ttttttaagt	atttgataca	tagttctgga	cctaagtttt	t		

- (2) INFORMATION FOR SEQ ID NO:3619:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 167 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..167
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577583
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3619:
- Met Val His Trp Phe Ala Ala Ser Lys Ser Ser Leu Asn Met Asp Xaa 1 5 10 15 Leu Asp His Ser Asp Asp Glu Glu Glu Gln Gln Asp Arg Cys Gly Thr

20 25 30
Ser Ser Gly Arg Ser Gly Ser Arg Leu Gly Ala Arg Xaa Gly Gly Arg

Ser Ser Gly Arg Ser Gly Ser Arg Leu Gly Ala Arg Xaa Gly Gly Arg
35 40 45

Ser Gly Gly Gln Ala Ala Ala Pro Glu Pro Ala Ala His Gly Leu Arg
50
55
60
Arg Arg Cly Arg Arg Arg Cly Arg Arg Val Cly His Arg Ala

Arg Arg Gln Arg Arg Arg Gly Arg Arg Val Gly Gly His Arg Ala
65 70 75 80

Ala Ala Arg Leu Arg Ala Leu Val Pro Val Arg Pro Pro Pro Arg Arg 85 90 95

Arg Gln Glu Ser Ala Ser Gly Ala Ala Gly Cys Arg Xaa Gly Gly Ala 100 105 110 Ala Glu Gly Ala Gly Gln Ala Gly Glu Gly Val Pro Ala Thr Ala Ser

115 120 125 Ala Arg Ala Thr Ala Thr Ala Ala Ala Glu Ala Gly Val Glu Ala Asp

130 135 140
Arg Val Arg Glu Val Lys Glu Gln Xaa Gly Arg Arg Arg Ala Gly Gly
145 150 155 160

Arg Trp Val Arg Arg Leu Val

165

- (2) INFORMATION FOR SEQ ID NO:3620:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 154 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..154
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577584
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3620:
- Met Asp Xaa Leu Asp His Ser Asp Asp Glu Glu Glu Gln Gln Asp Arg

 1 5 10 15
- Cys Gly Thr Ser Ser Gly Arg Ser Gly Ser Arg Leu Gly Ala Arg Xaa 20 25 30
- Gly Gly Arg Ser Gly Gly Gln Ala Ala Pro Glu Pro Ala Ala His 35 40 45
- Gly Leu Arg Arg Gln Arg Arg Arg Gly Arg Arg Val Gly Gly 50 55 60
- His Arg Ala Ala Ala Arg Leu Arg Ala Leu Val Pro Val Arg Pro Pro 65 70 75 80
- Pro Arg Arg Gln Glu Ser Ala Ser Gly Ala Ala Gly Cys Arg Xaa 85 90 95
- Gly Gly Ala Ala Glu Gly Ala Gly Gln Ala Gly Glu Gly Val Pro Ala 100 105
- Thr Ala Ser Ala Arg Ala Thr Ala Thr Ala Ala Ala Glu Ala Gly Val $115 \hspace{1.5cm} 120 \hspace{1.5cm} 125$
- Glu Ala Asp Arg Val Arg Glu Val Lys Glu Gln Xaa Gly Arg Arg 130 135 140
- Ala Gly Gly Arg Trp Val Arg Arg Leu Val 145
- (2) INFORMATION FOR SEQ ID NO:3621:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 188 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..188
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577585
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3621:
- Met Arg Arg Ser Ser Arg Thr Gly Ala Ala Pro Ala Ala Ala Asp Gln 1 5 10 15
- Ala Pro Gly Ser Ala Arg Gly Xaa Ala Ala Glu Ala Glu Val Arg Arg 20 25 30
- Gln Arg Gln Asn Leu Leu Met Asp Cys Val Gly Gly Asn Gly Gly 35 40 45
- Asp Gly Asp Gly Ala Leu Glu Asp Thr Ala Pro Leu Pro Asp Tyr Glu 50 60
- Leu Leu Ser Gln Ser Ala Arg Leu His Asp Asp Ala Lys Asn Pro Pro 65 70 75 80
- Pro Ala Leu Leu Val Ala Xaa Glu Glu Glu Gln Gln Lys Ala Pro Ala 85 90 95
- Lys Gln Gly Lys Ala Ser Pro Pro Gln Pro Pro Pro Val Pro Leu Pro
 100 105 110
- Gln Arg Gln Gln Lys Pro Ala Trp Arg Leu Ile Glu Tyr Val Arg Ser
- Arg Asn Xaa Ser Gly Gly Ala Gly Pro Gly Val Gly Gly Cys Gly Ala
 130
 135
 140
- Trp Ser Asp Gly Asp Ser Lys Ser Ser Glu Asp Gly Glu Asp Gly Gly 145 150 155 160
- Gly Glu Gly Lys Lys Asp Lys Lys Lys Lys Arg Ser Ser Trp Leu Pro 165 170 175
- Asp Pro Asp Arg Arg Trp Pro Val Gln Gly Phe Tyr

180 185

- (2) INFORMATION FOR SEQ ID NO:3622:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 854 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..854
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577601
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3622:

acttqctcca tatcccatcc atcacagcta gctagcgtac agacgaataa tctcttcttc 60 acctcactag ctaacaccag ctagcagete gategetetg teetgeaata atggeegete 120 getectecte ceageagetg gtegeggegg eggteetgge ageggegets etgetgetgg 180 cggcgggggc cgggacggcg tcggcggcgg tgagctgcgg cgaggtgacg tcgtcggtgg 240 cgccgtgcct cgggtacgcg atgggcagcg cggcgtcgcc ctccgcggcg tgctgcagcg 300 gggtgcgctc gctcaacagc cgcgcgtcgt cggcggcgga ccgncaggcc acctgcaact 360 gcctcaagag catgacggcc cggctcggcg gcggcgtcag Catggccaac gccgccaaca 420 tecceggeaa gtgeggegte teegteggeg tgeecateag eeceacegte gaetgeacea 480 agatcaactg atcgatggaa ccatagtgga ggtagctcgc tcgttggatg gcagcgtacg 540 tggccatcag cagcatgcag tcgtcgtcgt agcagagatg tcctagctac gtgtgtgtca 600 tgcatcagac tggcacataa taaagaagta gatcatgcac ccactagtga tcacttcgtc 660 tagtgtccct ccgttcgctg ttgtcgtcgt cgtcgtcgtg gtgtacctcg tacgtgacat 720 gccgtagcac gtacgctagc agagcagcac ctcaatgtcc ttgggtttgc tttgctggct 780 ctctgttttc gtctcgtgtt gcttttaatc tggcacaggt ttctaaatta taataatgaa 840 tacttttttg tcct

- (2) INFORMATION FOR SEQ ID NO:3623:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 126 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..126
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577602
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3623:

Met Ala Ala Arg Ser Ser Ser Gln Gln Leu Val Ala Ala Ala Val Leu $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Ala Ala Ala Xaa Leu Leu Leu Ala Ala Gly Ala Gly Thr Ala Ser Ala 20 25 30

Ala Val Ser Cys Gly Glu Val Thr Ser Ser Val Ala Pro Cys Leu Gly $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Ala Met Gly Ser Ala Ala Ser Pro Ser Ala Ala Cys Cys Ser Gly 50 60

Val Arg Ser Leu Asn Ser Arg Ala Ser Ser Ala Ala Asp Xaa Gln Ala 65 70 75 80

Thr Cys Asn Cys Leu Lys Ser Met Thr Gly Arg Leu Gly Gly Val 85 90 95

Ser Met Ala Asn Ala Asn Ile Pro Gly Lys Cys Gly Val Ser Val 100 105 110

Gly Val Pro Ile Ser Pro Thr Val Asp Cys Thr Lys Ile Asn \$115\$ \$120\$ \$125\$

- (2) INFORMATION FOR SEQ ID NO:3624:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 76 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

(D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..76 (D) OTHER INFORMATION: / Ceres Seq. ID 1577603 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3624: Met Gly Ser Ala Ala Ser Pro Ser Ala Ala Cys Cys Ser Gly Val Arg 10 Ser Leu Asn Ser Arg Ala Ser Ser Ala Ala Asp Xaa Gln Ala Thr Cys Asn Cys Leu Lys Ser Met Thr Gly Arg Leu Gly Gly Gly Val Ser Met 40 Ala Asn Ala Ala Asn Ile Pro Gly Lys Cys Gly Val Ser Val Gly Val 55 Pro Ile Ser Pro Thr Val Asp Cys Thr Lys Ile Asn 70 (2) INFORMATION FOR SEQ ID NO:3625: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 572 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..572 (D) OTHER INFORMATION: / Ceres Seq. ID 1577610 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3625: aagaaaagcc tccattcccg agtctccagc caaccgcatc cagtccaccc catcccctc 60 gaccccgaca accccgagtc ccgacccgat ggcgcccaag gccgagaaga agccagcgga 120 180 gaagaagccg gcggccgagg agaaggcgga gaagacgacc gcagGtaaga ggctttggct ttgtgaacta ctccgacagt gatgctgcca aggaagctat ttctgcaatg gatggcaagg 240 aaattgatgg gcggcaggta cgtgtcaaca tggctaatga gagacctgct gggaaccgtg 300 gtggtggcgg ctatggtggc ggcggctatg gaggtggtgg ctacggaggt ggtggcggct 360 acggaggtgg tggctatggt ggtggcagcc aaagctatga tgcttgaagg gggcaggatc 420 ctattaagtc attatcaacc aagatatttg aaataatgaa ctttaggact tggtatgacg 480 ttttatgtta agcattgtca ggttttgcta ttcgtgttat gctgaattgt tggaactcct agatgcagaa tattacgtat tggttttggt cc (2) INFORMATION FOR SEQ ID NO:3626: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 134 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..134 (D) OTHER INFORMATION: / Ceres Seq. ID 1577611 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3626: Glu Lys Pro Pro Phe Pro Ser Leu Gln Pro Thr Ala Ser Ser Pro Pro 5 10 His Pro Pro Arg Pro Arg Gln Pro Arg Val Pro Thr Arg Trp Arg Pro 20 25 Arg Pro Arg Arg Ser Gln Arg Arg Arg Ser Arg Arg Pro Arg Arg Arg 40 Arg Arg Arg Pro Gln Val Arg Gly Phe Gly Phe Val Asn Tyr Ser

60

75

55

70

Asp Ser Asp Ala Ala Lys Glu Ala Ile Ser Ala Met Asp Gly Lys Glu

Ile Asp Gly Arg Gln Val Arg Val Asn Met Ala Asn Glu Arg Pro Ala 85 90 95

Gly Asn Arg Gly Gly Gly Gly Tyr Gly Gly Gly Gly Gly Gly Gly Gly 100 105

Ser Gln Ser Tyr Asp Ala 130

- (2) INFORMATION FOR SEQ ID NO:3627:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 84 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..84
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577612
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3627:

Met Leu Pro Arg Lys Leu Phe Leu Gln Trp Met Ala Arg Lys Leu Met 1 5 10 15

Gly Gly Arg Tyr Val Ser Thr Trp Leu Met Arg Asp Leu Leu Gly Thr $20 \\ 25 \\ 30$

Val Val Ala Ala Met Val Ala Ala Ala Met Glu Val Val Ala Thr
35 40 45

Glu Val Val Ala Ala Thr Glu Val Val Ala Met Val Val Ala Ala Lys 50 55 60

Ala Met Met Leu Glu Gly Gly Arg Ile Leu Leu Ser His Tyr Gln Pro 65 70 75 80

Arg Tyr Leu Lys

- (2) INFORMATION FOR SEQ ID NO:3628:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 74 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..74
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577613
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3628:

Met Ala Arg Lys Leu Met Gly Gly Arg Tyr Val Ser Thr Trp Leu Met 1 5 10 15

Arg Asp Leu Leu Gly Thr Val Val Val Ala Ala Met Val Ala Ala Ala Ala 20 25 30

Met Glu Val Val Ala Thr Glu Val Val Ala Ala Thr Glu Val Val Ala 35 40 45

Met Val Val Ala Ala Lys Ala Met Met Leu Glu Gly Gly Arg Ile Leu 50 55 60

Leu Ser His Tyr Gln Pro Arg Tyr Leu Lys 65 70

- (2) INFORMATION FOR SEQ ID NO:3629:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 731 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)

- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..731
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577614
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3629: aaaaacccta gcagccaccc ggttctccct cgctccaggt ggcggcgcgc tcccctcgtt 60 ttgttcttac tcctcccgtt tccctcacta gtcgttactg acttctcgct tgcctgctcc agatctccct tcgcagccgg ccagggaccc cttcacagcg cgggagatgg ctgatcagga ggccccagtt gcagttgagg caccaacccc agttcttgga gagccaatgg acttgatgac tgcgctgcag ctggtgatga agaagtcaag tgctcatgat ggacttgtga agggtcttcg 360 cgaggetgee aaggecattg agaagcatge tgeteagett tgegttettg etgaggaetg tgaccagcca gattatgtca agctggtgaa ggcgctctgt gctgaacaca atgttcacct 420 tgtcactgtt cctgctgcta agactcttgg cgagtgggct gggctttgca agattgactc 480 cgagggcaag gcaaggaagg ttgtaggctg ctcctgtgtc gttgtcaagg actacggtga 540 agaatctgag ggccttaaca tagtgcagga gtatgtcaag tcgcactaga tgtAacacgt ttcagtaata ctctacattt ggatctgggc ttaatattat gcttgcgtct tgggcttgct 660 aggagattag gacaatttac tacaagagcc catgaggata tgagcaattt ggaattctaa 720
- (2) INFORMATION FOR SEQ ID NO:3630:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 140 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

atgttttgtt t

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..140
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577615
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3630: Met Ala Asp Gln Glu Ala Pro Val Ala Val Glu Ala Pro Thr Pro Val 1.0 5 Leu Gly Glu Pro Met Asp Leu Met Thr Ala Leu Gln Leu Val Met Lys 25 20 Lys Ser Ser Ala His Asp Gly Leu Val Lys Gly Leu Arg Glu Ala Ala 45 40 Lys Ala Ile Glu Lys His Ala Ala Gln Leu Cys Val Leu Ala Glu Asp 60 55 Cys Asp Gln Pro Asp Tyr Val Lys Leu Val Lys Ala Leu Cys Ala Glu 70 75 His Asn Val His Leu Val Thr Val Pro Ala Ala Lys Thr Leu Gly Glu 90 85 Trp Ala Gly Leu Cys Lys Ile Asp Ser Glu Gly Lys Ala Arg Lys Val 105 Val Gly Cys Ser Cys Val Val Lys Asp Tyr Gly Glu Glu Ser Glu 120 Gly Leu Asn Ile Val Gln Glu Tyr Val Lys Ser His
- 130 135
- (2) INFORMATION FOR SEQ ID NO:3631:
 - (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..120
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577616
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3631:
- Met Asp Leu Met Thr Ala Leu Gln Leu Val Met Lys Lys Ser Ser Ala

```
10
               5
His Asp Gly Leu Val Lys Gly Leu Arg Glu Ala Ala Lys Ala Ile Glu
                              25
Lys His Ala Ala Gln Leu Cys Val Leu Ala Glu Asp Cys Asp Gln Pro
                          40
Asp Tyr Val Lys Leu Val Lys Ala Leu Cys Ala Glu His Asn Val His
                       55
Leu Val Thr Val Pro Ala Ala Lys Thr Leu Gly Glu Trp Ala Gly Leu
                                       75
                  70
Cys Lys Ile Asp Ser Glu Gly Lys Ala Arg Lys Val Val Gly Cys Ser
                                  90
              8.5
Cys Val Val Lys Asp Tyr Gly Glu Glu Ser Glu Gly Leu Asn Ile
           100 105
Val Gln Glu Tyr Val Lys Ser His
       115
(2) INFORMATION FOR SEQ ID NO:3632:
     (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 117 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
         (B) LOCATION: 1..117
          (D) OTHER INFORMATION: / Ceres Seq. ID 1577617
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3632:
Met Thr Ala Leu Gln Leu Val Met Lys Lys Ser Ser Ala His Asp Gly
                                   10
Leu Val Lys Gly Leu Arg Glu Ala Ala Lys Ala Ile Glu Lys His Ala
                               25
           20
Ala Gln Leu Cys Val Leu Ala Glu Asp Cys Asp Gln Pro Asp Tyr Val
                           40
                                               45
Lys Leu Val Lys Ala Leu Cys Ala Glu His Asn Val His Leu Val Thr
                       55
                                          60
Val Pro Ala Ala Lys Thr Leu Gly Glu Trp Ala Gly Leu Cys Lys Ile
                                       75
Asp Ser Glu Gly Lys Ala Arg Lys Val Val Gly Cys Ser Cys Val Val
                                  90
Val Lys Asp Tyr Gly Glu Glu Ser Glu Gly Leu Asn Ile Val Gln Glu
                               105
           100
Tyr Val Lys Ser His
        115
(2) INFORMATION FOR SEQ ID NO:3633:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 790 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
     (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..790
          (D) OTHER INFORMATION: / Ceres Seq. ID 1577622
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3633:
aaaggccaaa atcatcgctg crccgccagt rgacgcgttc gactccggcc gccgcccctg
                                                                      60
ctectectge ceaecegeae eggecattge ectegeetge tetgecaeee geaectteea
                                                                      120
cegececege gtgeteetee geagtetgge egttgeacee acetgeweee caccacegee
                                                                     180
geoceaecca ettatecaec gttgemggte gtegemeeam etgeteecce aetgaeaecg
                                                                      240
                                                                      300
gtcgaggtat aatctcaccc tgggtgaagc ttcacccgac tgctccgatc acaccgaacc
 aaacccatcc gagcgcatat acccagcaaa aaagtggaca catttttac agcctaggtt
                                                                      360
```

tNtccgCtgc gcccctgtt ttcgaaatcc tttccctagc gatcataact gacgccccga 420 atcgCcgcgc ggcggggag gagattcatc acgttttctg ctagggttt gtatttggac 480 tagacagagc ggaaatctgg tggtggtat tctgtaacca gaagatcaga aactacggag 540 gagtgggtt ttgtgattgg ttaccgatag gggttttgat tcatcggcac ccaaattgct 600 gttgatttt tcctgcagtt tctctcaatg tatttatggt catggtagta ctggattatg 660 gatacatttt tttcaagtga ttcataatct gcatcactcc tttttaaaaa agatcatcaa 720 tgaggagtga tgatatgatg attttttat ttatctgtta acatcagtaa catcataata 780 gttttttttc

- (2) INFORMATION FOR SEQ ID NO:3634:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 83 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..83
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577623
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3634:

Lys Gly Gln Asn His Arg Cys Xaa Ala Ser Xaa Arg Val Arg Leu Arg 1 5 10 15

Pro Pro Pro Leu Leu Leu Pro Thr Arg Thr Gly His Cys Pro Arg 20 25 30

Leu Leu Cys His Pro His Leu Pro Pro Pro Pro Arg Ala Pro Pro Gln 35 40 45

Ser Gly Arg Cys Thr His Leu Xaa Pro Thr Thr Ala Ala Pro Pro Thr 50 55 60

Tyr Pro Pro Leu Xaa Val Val Xaa Pro Xaa Ala Pro Pro Leu Thr Pro 65 70 75 80

Val Glu Val

- (2) INFORMATION FOR SEQ ID NO:3635:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..77
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577624
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3635:

Lys Ala Lys Ile Ile Ala Xaa Pro Pro Xaa Asp Ala Phe Asp Ser Gly
1 10 15

Arg Arg Pro Cys Ser Ser Cys Pro Pro Ala Pro Ala Ile Ala Leu Ala 20 25 30

Cys Ser Ala Thr Arg Thr Phe His Arg Pro Arg Val Leu Leu Arg Ser

Leu Ala Val Ala Pro Thr Cys Xaa Pro Pro Pro Pro Pro His Pro Leu 50 55 60

- Ile His Arg Cys Xaa Ser Ser Xaa Xaa Leu Leu Pro His 65 70 75
- (2) INFORMATION FOR SEQ ID NO:3636:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 153 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..153
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577625
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3636:

Arg Pro Lys Ser Ser Leu Xaa Arg Gln Xaa Thr Arg Ser Thr Pro Ala 1 10 15

Ala Ala Pro Ala Pro Pro Ala His Pro His Arg Pro Leu Pro Ser Pro 20 25 30

Ala Leu Pro Pro Ala Pro Ser Thr Ala Pro Ala Cys Ser Ser Ala Val 35 40 45

Trp Pro Leu His Pro Pro Xaa Pro His His Arg Arg Pro Thr His Leu 50 60

Ser Thr Val Xaa Gly Arg Arg Xaa Xaa Cys Ser Pro Thr Asp Thr Gly 65 70 75 80

Arg Gly Ile Ile Ser Pro Trp Val Lys Leu His Pro Thr Ala Pro Ile 85 90 95

Thr Pro Asn Gln Thr His Pro Ser Ala Tyr Thr Gln Gln Lys Ser Gly
100 105 110

His Ile Phe Tyr Ser Leu Gly Xaa Ser Ala Ala Pro Pro Val Phe Glu 115 120 125

Ile Leu Ser Leu Ala Ile Ile Thr Asp Ala Pro Asn Arg Arg Ala Ala 130 135 140

Gly Glu Glu Ile His His Val Phe Cys 145

- (2) INFORMATION FOR SEQ ID NO:3637:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 798 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..798
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577634
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3637:

aacctcgtcg tgtctcggct tggcttggct tcctcctccc cgacgaccac cccgcgcttc 60 tectetecee eegteecace tteegagagg etegageeet gateecacge tgagggegge 120 180 ggtgttagga gtttagcgat ggcgaggtgg cggccggcgg cgctgctggt agtggcgctg acagcggttc tgtcggcrgc gcrgcgggcg gatgcgctct cagtgacggt gaccgacacc 240 300 gagtgcatcc accegecteg egeacceggt teegegtgee tttecceace tactetegeg 360 Getetegeca gecagtetag ggttteggte eeggegtget tateegeece egeeggeeat gtcgaagcaa ggagggaagg ccaagccgct gaaggcgccc aaggccgaca agaaggagta 420 cgacgagact gatcttgcat atctgcagaa gaagaaagat gaggaaaaag cactgaagga 480 gcttaaggcc aaggcacaga agggcgcgat tgggggctcg ggtctgaaga aaagtggaaa 540 gaaatgagac tggtcacccg tctccaatac ctagaggatg ataaggcagc tgtctatctg 600 tgttgcgctt cactaagtgt gattgtaaca gtggtacctc ttgtgttctg tgttccgcga 660 tgttgcagtt ggttgcttga tcgaaagatg tttcaacctc ccatctgcta gctatgatac 720 agatggtccc ctgataataa tgatgacata ttctgtgatg gatgccacag cattttttgt 780 ttttgttttt gcattcag

- (2) INFORMATION FOR SEQ ID NO:3638:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 97 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..97

(D) OTHER INFORMATION: / Ceres Seq. ID 1577635 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3638: Met Ala Arg Trp Arg Pro Ala Ala Leu Leu Val Val Ala Leu Thr Ala 10 Val Leu Ser Xaa Ala Xaa Arg Ala Asp Ala Leu Ser Val Thr Val Thr 25 20 Asp Thr Glu Cys Ile His Pro Pro Arg Ala Pro Gly Ser Ala Cys Leu 40 Ser Pro Pro Thr Leu Ala Ala Leu Ala Ser Gln Ser Arg Val Ser Val 60 55 Pro Ala Cys Leu Ser Ala Pro Ala Gly His Val Glu Ala Arg Arg Glu 75 70 Gly Gln Ala Ala Glu Gly Ala Gln Gly Arg Gln Glu Gly Val Arg Arg 90

Asp

- (2) INFORMATION FOR SEQ ID NO:3639:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 62 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..62
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577636
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3639:

Met Ser Lys Gln Gly Gly Lys Ala Lys Pro Leu Lys Ala Pro Lys Ala 1 5 10 15

Asp Lys Lys Glu Tyr Asp Glu Thr Asp Leu Ala Tyr Leu Gln Lys Lys 20 25 30

Lys Asp Glu Glu Lys Ala Leu Lys Glu Leu Lys Ala Lys Ala Gln Lys 35 40 45

Gly Ala Ile Gly Gly Ser Gly Leu Lys Lys Ser Gly Lys Lys 50 60

- (2) INFORMATION FOR SEQ ID NO:3640:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 55 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..55
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577637
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3640:

Met Arg Leu Val Thr Arg Leu Gln Tyr Leu Glu Asp Asp Lys Ala Ala
1 5 10 15

Val Tyr Leu Cys Cys Ala Ser Leu Ser Val Ile Val Thr Val Val Pro 20 25 30

Leu Val Phe Cys Val Pro Arg Cys Cys Ser Trp Leu Leu Asp Arg Lys 35 40 45

Met Phe Gln Pro Pro Ile Cys
50 55

- (2) INFORMATION FOR SEQ ID NO:3641:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 810 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..810
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577653
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3641:

gtcgagttcg accetggatt tggcgatgrg ccccggcgc ctcctcccc gcagcgcgtc ccgtacgct ccttcgctcc aggaaggga aggagcgga sgggaacgag gagcaggaat 120 ctggcgctct ccgcttcctc ctccaacggt gcagcagtgc catccctgac aacagattcG 180 ggagaagaag ggcccagtga taatggaaat tccactggac caaatccgga ggccactgat 240 gcgaacgcgg gccaatgatc cagtcaaggt gcaagaactc atgggcagta tccgtgtcat 300 cggcctccaa gtacctattg atgtgttgga ggtcgatggg gtctattatg gcttctctgg atgccaccgc tacgaggct accagcgcct tggtctccca accatccgct gcaaagttcg 420 ccgtgggaca aaggaaacac tgaggcacca tatgcgatga gttatattt attcagttac 480 cagagtact ccatacctgt aaatgttgc caaacaggt ggtgaatagt acctctgtac 540 ctgcaattct ccatacctgt aaatgttgc caaacagagt ggtgaatagt acctctgtac 600 ccagcagcat cagaaaatgt taattttgcc tacaacaccc ttttcgatca gtggatggat 660 gagtaccacc cgctcagtag atcattccat ttctacgaga tttttgtaaa aaaagaaaaa 720 tgcagcagca gtcggcacgc tgggtcattt agatcatcta gaaaaccaga aaaaccagagt 780 catgtaactt gtttggctcg tgcaaaaaa	(VI) DEGORIGE DEP	OICITITOIS. DI	12 1D 1.0.00			
ctggcgctct ccgcttcctc ctccaacggt gcagcagtgc catccctgac aacagattcG ggagaagaag ggcccagtga taatggaaat tccactggac caaatccgga ggccactgat 240 gcgaacgcgg gccaatgatc cagtcaaggt gcaagaactc atgggcagta tccgtgtcat 300 cggcctccaa gtacctattg atgtgttgga ggtcgatggg gtctattatg gcttctctgg 360 atgccaccgc tacgaggctc accagcgcct tggtctcca accatccgct gcaaagttcg 420 ccgtgggaca aaggaaacac tgaggcacca tatgcgatga gttatattt attcagttac 480 cagcagtct ccatacctgt aaatgttgtc caaacagagt ggtgaatagt acttctgtac 600 ccagcagcat cagaaaatgt taattttgcc tacaacactc ttttcgatca gtggatggat 660 gagtaccacc ggctcagtag atcattccat ttctacgaga tttttgtaaa aaaagaaaaa 720 tgcagcagca gtcggcaccc tgtgtcattt agatcatcta gaaaaccaga aaaacgagt 780	gtcgagttcg accctggatt	tggcgatgrg	ccccggcgcc	ctcctccccc	gcagcgcgtc	60
ctggcgctct ccgcttcctc ctccaacggt gcagcagtgc catccctgac aacagattcG ggagaagaag ggcccagtga taatggaaat tccactggac caaatccgga ggccactgat 240 gcgaacgcgg gccaatgatc cagtcaaggt gcaagaactc atgggcagta tccgtgtcat 300 cggcctccaa gtacctattg atgtgttgga ggtcgatggg gtctattatg gcttctctgg 360 atgccaccgc tacgaggcct accagcgcct tggtctccca accatccgct gcaaagttcg 420 ccgtgggaca aaggaaacac tgaggcacca tatgcgatga gttatattt attcagttac 480 cagcagtct ccatacctgt aaatgttgtc caaacagagt ggtgaatagt acttctgtac 600 ccagcagcat cagaaaatgt taattttgcc tacaacactc ttttcgatca gtggatggat 660 gagtaccacc gcctcagtag atcattccat ttctacgaga tttttgtaaa aaaagaaaaa 720 tgcagcagca gtcggcacgc tgtgtcattt agatcatcta gaaaaccaga aaaacgagt 780	ccgtacgcct ccttcgctcc	aggaagggga	aggagcgcga	sgggaacgag	gagcaggaat	120
ggagaagaag ggcccagtga taatggaaat tccactggac caaatccgga ggccactgat 240 gcgaacgcgg gccaatgatc cagtcaaggt gcaagaactc atgggcagta tccgtgtcat 300 cggcctccaa gtacctattg atgtgttgga ggtcgatggg gtctattatg gcttctctgg 360 atgccaccgc tacgaggctc accagcgcct tggtctccca accatccgct gcaaagttcg 420 ccgtgggaca aaggaaacac tgaggcacca tatgcgatga gttatattt attcagttac 480 cagcagttct ccatacctgt aaatgttgtc caaacagagt ggtgaatagt acttctgtac 600 ccagcagcat cagaaaatgt taattttgcc tacaacactc ttttcgatca gtggatggat 660 gagtaccacc ggtcgatga atcattccat ttctacgaga tttttgtaaa aaaagaaaaa 720 tgcagcagca gtcggcacgc tgtgtcattt agatcatcta gaaaaccaga aaaacgagt 780	ctggcgctct ccgcttcctc	ctccaacggt	gcagcagtgc	catccctgac	aacagattcG	180
gcgaacgegg gccaatgate cagteaaggt gcaagaacte atgggeagta teegtgteat 300 cggcetecaa gtacetattg atgtgttgga ggtegatggg gtetattatg gettetetgg 360 atgceacge tacgaggete accagegeet tggteteca accateeget gcaaagtteg 420 cegtgggaca aaggaaacae tgaggeacea tatgegatga gttatattt atteagttae 480 aaagtgatet gtgtatetag agetaaaaca gaagetteea tggtettte gtegtetegt 540 ctgcaattet ecatacetgt aaatgttgte caaacagagt ggtgaatagt acttetgtae 600 ceageageat cagaaaatgt taattttgee tacaacacte ttttegatea gtggatggat 660 gagtaceace ggteggacge tgtgteattt agateateta gaaaaccaga aaaaagaaaa 720 tgcageagea gteggeacge tgtgteattt agateateta gaaaaccaga aaaaacgagt 780						240
cggcctccaa gtacctattg atgtgttgga ggtcgatggg gtctattatg gcttctctgg 360 atgccaccgc tacgaggctc accagcgcct tggtctccca accatccgct gcaaagttcg 420 ccgtgggaca aaggaaacac tgaggcacca tatgcgatga gttatattt attcagttac 480 aaagtgatct gtgtatctag agctaaaaca gaagcttcca tggtctttc gtcgtctcgt 540 ctgcaattct ccatacctgt aaatgttgtc caaacagagt ggtgaatagt acttctgtac 600 ccagcagcat cagaaaatgt taattttgcc tacaacactc ttttcgatca gtggatggat 660 gagtaccacc cgctcagtag atcattccat ttctacgaga tttttgtaaa aaaagaaaaa 720 tgcagcagca gtcggcacgc tgtgtcattt agatcatcta gaaaaccaga aaaacgagt 780						300
atgccaccgc tacgaggetc accagcgect tggtetecca accatecget geaaagtteg 420 cegtgggaca aaggaaacae tgaggeacea tatgegatga gttatattt atteagttae 480 aaagtgatet gtgtatetag agetaaaaca gaagetteca tggtettte gtegtetegt 540 ctgcaattet ecatacetgt aaatgttgte eaaacagagt ggtgaatagt aettetgtae 600 ceageageat eagaaaatgt taattttgee tacaacaete ttttegatea gtggatggat 660 gagtaceace egeteagtag ateatteeat ttetaegaga tttttgtaaa aaaagaaaaa 720 tgcageagea gteggeacge tgtgteattt agateateta gaaaaccaga aaaacgagt 780						360
ccgtgggaca aaggaaacac tgaggcacca tatgcgatga gttatattt attcagttac 480 aaagtgatct gtgtatctag agctaaaaca gaagcttcca tggtcttttc gtcgtctcgt 540 ctgcaattct ccatacctgt aaatgttgtc caaacagagt ggtgaatagt acttctgtac 600 ccagcagcat cagaaaatgt taattttgcc tacaacactc ttttcgatca gtggatggat 660 gagtaccacc cgctcagtag atcattccat ttctacgaga tttttgtaaa aaaagaaaaa 720 tgcagcagca gtcggcacgc tgtgtcattt agatcatcta gaaaaccaga aaaaacgagt 780						420
aaagtgatet gtgtatetag agetaaaaca gaagetteea tggtettte gtegtetegt 540 etgeaattet eeatacetgt aaatgttgte eaaacagagt ggtgaatagt acttetgtae 600 eeageageat eagaaaatgt taattttgee tacaacacte ttttegatea gtggatggat 660 gagtaceace egeteagtag atcatteeat ttetaegaga tttttgtaaa aaaagaaaaa 720 tgeageagea gteggeacge tgtgteattt agateateta gaaaaceaga aaaacgagt 780						480
ctgcaattet ccatacetgt aaatgttgte caaacagagt ggtgaatagt acttetgtae 600 ccagcagcat cagaaaatgt taattttgee tacaacacte ttttegatea gtggatggat 660 gagtaceace cgeteagtag atcatteeat ttetacgaga tttttgtaaa aaaagaaaaa 720 tgcagcagca gteggcacge tgtgteattt agateateta gaaaaccaga aaaaacgagt 780						540
ccagcagcat cagaaaatgt taattttgcc tacaacactc ttttcgatca gtggatggat 660 gagtaccacc cgctcagtag atcattccat ttctacgaga tttttgtaaa aaaagaaaaa 720 tgcagcagca gtcggcacgc tgtgtcattt agatcatcta gaaaaccaga aaaaacgagt 780						600
gagtaccacc cgctcagtag atcattccat ttctacgaga tttttgtaaa aaaagaaaaa 720 tgcagcagca gtcggcacgc tgtgtcattt agatcatcta gaaaaccaga aaaaacgagt 780						660
tgcagcagca gtcggcacgc tgtgtcattt agatcatcta gaaaaccaga aaaaacgagt 780						720
						780
			_	_		

- (2) INFORMATION FOR SEQ ID NO:3642:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 85 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..85
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577654
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3642:

Val Glu Phe Asp Pro Gly Phe Gly Asp Xaa Pro Arg Arg Pro Pro Pro 1 5 10 15

Pro Gln Arg Val Pro Tyr Ala Ser Phe Ala Pro Gly Arg Gly Arg Ser 20 25 30

Ala Xaa Gly Thr Arg Ser Arg Asn Leu Ala Leu Ser Ala Ser Ser Ser 35 40 45

Asn Gly Ala Ala Val Pro Ser Leu Thr Thr Asp Ser Gly Glu Glu Gly 50 55 60

Pro Ser Asp Asn Gly Asn Ser Thr Gly Pro Asn Pro Glu Ala Thr Asp 65 70 75 80

Ala Asn Ala Gly Gln

85

- (2) INFORMATION FOR SEQ ID NO:3643:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 85 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..85
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577655

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3643:

Met Glu Ile Pro Leu Asp Gln Ile Arg Arg Pro Leu Met Arg Thr Arg 1 5 10 15

Ala Asn Asp Pro Val Lys Val Gln Glu Leu Met Gly Ser Ile Arg Val
20 25 30

```
Ile Gly Leu Gln Val Pro Ile Asp Val Leu Glu Val Asp Gly Val Tyr
                            40
Tyr Gly Phe Ser Gly Cys His Arg Tyr Glu Ala His Gln Arg Leu Gly
                        55
Leu Pro Thr Ile Arg Cys Lys Val Arg Arg Gly Thr Lys Glu Thr Leu
```

75

Arg His His Met Arg 85

(2) INFORMATION FOR SEQ ID NO:3644:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 74 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..74
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577656
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3644:

Met Pro Pro Leu Arg Gly Ser Pro Ala Pro Trp Ser Pro Asn His Pro 10

Leu Gln Ser Ser Pro Trp Asp Lys Gly Asn Thr Glu Ala Pro Tyr Ala 20 25

Met Ser Tyr Ile Leu Phe Ser Tyr Lys Val Ile Cys Val Ser Arg Ala 40

Lys Thr Glu Ala Ser Met Val Phe Ser Ser Ser Arg Leu Gln Phe Ser 55

Ile Pro Val Asn Val Val Gln Thr Glu Trp

70

- (2) INFORMATION FOR SEQ ID NO:3645:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 770 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..770
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577661
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3645:

atqttatgta atatagtatg aagttatgaa gtccgaccca taccaccgcg cctagactgt 60 geotgeatee eteategete ggetegateg etgateagtt etgergeegg egaegtgtge 120 180 tagctcacga cgacgacatg ggctcggcgg tgaagatcgg gacgtggggc ggcgacggcG qqaqcccctg cgacatcacg gtggcgccgc ggcggctgga gagcatcacc atccgctgga 240 accagaggtg ggctgacaaa gcatacaaga agagccactt gggcaatgag tggaaaaaac 300 cttttgctgg atcatctcac gccaagggca tcgttctgga gaagattggt attgaggcca 360 agcagccaaa ttcggccatc cgtaagtgtg cccgtgttca gctggtgaag aatggaaaga 420 agattgctgc ctttgtgccg aatgatggtt gcctaaacta catcgaggag aatgatgagg 480 tgttgattgc tggatttggt cgtaagggtc atgctgtggg agacattcct ggtgtcaggt 540 tcaaggttgt taaggtgtct ggtgtgtcgc tgcttgcact cttcaaggag aagaaggaga 600 660 agCcaaggtc ttagatcact ttcggtagtc aagaatggtg taaactgccc aaggctctat tgttaaagtt ctgctagcaa cagagctgtt aattctgagc tgtacctttt tgttaacatt 720 gttacagtct tacagagttc tgtttccatt ttgaagatat taatattgcg

- (2) INFORMATION FOR SEQ ID NO:3646:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 158 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..158
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577662
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3646: Met Gly Ser Ala Val Lys Ile Gly Thr Trp Gly Gly Asp Gly Gly Ser 10 Pro Cys Asp Ile Thr Val Ala Pro Arg Arg Leu Glu Ser Ile Thr Ile 20 25 30 Arg Trp Asn Gln Arg Trp Ala Asp Lys Ala Tyr Lys Lys Ser His Leu 3.5 40 Gly Asn Glu Trp Lys Lys Pro Phe Ala Gly Ser Ser His Ala Lys Gly 55 Ile Val Leu Glu Lys Ile Gly Ile Glu Ala Lys Gln Pro Asn Ser Ala 75 70 Ile Arg Lys Cys Ala Arg Val Gln Leu Val Lys Asn Gly Lys Lys Ile 90 85 Ala Ala Phe Val Pro Asn Asp Gly Cys Leu Asn Tyr Ile Glu Glu Asn 105 110 100

Asp Glu Val Leu Ile Ala Gly Phe Gly Arg Lys Gly His Ala Val Gly

120 125 Asp Ile Pro Gly Val Arg Phe Lys Val Val Lys Val Ser Gly Val Ser 135 140

Leu Leu Ala Leu Phe Lys Glu Lys Glu Lys Pro Arg Ser 155 150

- (2) INFORMATION FOR SEQ ID NO:3647:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 969 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..969
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577663
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3647:

acataacceg ccatameeae necectegee geetgertee aceteegeee eeegeeetee 60 ccqcqtcccc cctctcctac gcagatcgtc caggtaagat gtcgtccgag gcggtgaagg 120 tggcggtgcc ggagtcggta ctccgcaagc ggaagcgcng aggagcagtg ggccgccgag 180 aagaaggaga agtccctggc cgagaggaag aagtccatcg agaaccggaa gctcatcttc 240 accegegeca ageagtaege egaggagtae gatgeecagg agaaggaaet ggtacagett 300 360 aagcgtgagg cccgtttgaa gggtggtttc tatgtcagtc ctgagGcaaa gctgctattt gtgatccgca tccgtggtat caatgccatg catcctaaga ccaggaagat attgcagctt 420 480 ctgcgtttga ggcagatatt caatggcgtg ttcctgaaag tcaacaaggc taccattaac 540 atgCttcgca gggttgagcc ttatgttgca tatgggtacc Cgaacttgaa gagtgtcagg 600 gagttgatct acaagagggg ctacggaaaa ctgaacaagc agaggatccc tctgtctaac aaccaagtca tcgaggaggg cttgggcaag cacaacatca tttgcattga ggatcttgtt 660 catgagatca tgactgtcgg cccacacttc aaggaggcga acaacttcct ttggccattt 720 aagctgaagg caccgctggg aggtctgaag aagaagagga accactatgt ggagggtggt 780 gatgccggta accgtgagaa ttacatcaac gagctcatca aaaggatgaa ttaggttcac 840 gatcaagctc tattgtgttc taagaaactt tctgtgctct cccaatttta cattattagg 900 aagcggatga atatgcatgc agttttgttg tttggaacta gatgtgtatg gaagaaacat 960 gatcttttc

- (2) INFORMATION FOR SEQ ID NO:3648:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 99 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..99
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577664
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3648:

Ile Thr Arg His Xaa His Xaa Pro Arg Arg Leu Xaa Pro Pro Pro 1 5 10 15

Pro Ala Leu Pro Ala Ser Pro Leu Ser Tyr Ala Asp Arg Pro Gly Lys 20 25 30

Met Ser Ser Glu Ala Val Lys Val Ala Val Pro Glu Ser Val Leu Arg 35 40 45

Lys Arg Lys Arg Xaa Gly Ala Val Gly Arg Arg Glu Glu Gly Glu Val 50 55 60

Pro Gly Arg Glu Glu Glu Val His Arg Glu Pro Glu Ala His Leu His 65 70 75 80

Pro Arg Gln Ala Val Arg Gly Val Arg Cys Pro Gly Glu Gly Thr

Gly Thr Ala

- (2) INFORMATION FOR SEQ ID NO:3649:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 148 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..148
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577665
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3649:

Met His Pro Lys Thr Arg Lys Ile Leu Gln Leu Leu Arg Leu Arg Gln 1 10 15

Ile Phe Asn Gly Val Phe Leu Lys Val Asn Lys Ala Thr Ile Asn Met 20 25 30

Leu Arg Arg Val Glu Pro Tyr Val Ala Tyr Gly Tyr Pro Asn Leu Lys 35 40 45

Ser Val Arg Glu Leu Ile Tyr Lys Arg Gly Tyr Gly Lys Leu Asn Lys 50 60

Gln Arg Ile Pro Leu Ser Asn Asn Gln Val Ile Glu Glu Gly Leu Gly 65 70 75 80

Lys His Asn Ile Ile Cys Ile Glu Asp Leu Val His Glu Ile Met Thr 85 90 95

Val Gly Pro His Phe Lys Glu Ala Asn Asn Phe Leu Trp Pro Phe Lys 100 105 110

Leu Lys Ala Pro Leu Gly Gly Leu Lys Lys Lys Arg Asn His Tyr Val 115 120 125

Glu Gly Gly Asp Ala Gly Asn Arg Glu Asn Tyr Ile Asn Glu Leu Ile 130 135 140

Lys Arg Met Asn

145

- (2) INFORMATION FOR SEQ ID NO:3650:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 117 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

(B) LOCATION: 1..117

(D) OTHER INFORMATION: / Ceres Seq. ID 1577666

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3650: Met Leu Arg Arg Val Glu Pro Tyr Val Ala Tyr Gly Tyr Pro Asn Leu

Lys Ser Val Arg Glu Leu Ile Tyr Lys Arg Gly Tyr Gly Lys Leu Asn 20 25 30

Lys Gln Arg Ile Pro Leu Ser Asn Asn Gln Val Ile Glu Glu Gly Leu 35 40 45

Gly Lys His Asn Ile Ile Cys Ile Glu Asp Leu Val His Glu Ile Met 50 55 60

Thr Val Gly Pro His Phe Lys Glu Ala Asn Asn Phe Leu Trp Pro Phe 65 70 75 80

Lys Leu Lys Ala Pro Leu Gly Gly Leu Lys Lys Lys Arg Asn His Tyr 85 90 95

Val Glu Gly Gly Asp Ala Gly Asn Arg Glu Asn Tyr Ile Asn Glu Leu 100 105 110

Ile Lys Arg Met Asn 115

- (2) INFORMATION FOR SEQ ID NO:3651:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..433
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577678
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3651: atcattggtc tgctagcaga aacctcagag atatgttaca gagaaataaa ggacatcaag 60 tgcatcacct gccctcacaa gccagaaggt tccatgtttg tcatggtgaa attaaatttg 120 tatcttttgg aggggattca tgacgatatt gatttttgct gcaagCtggc aaaagaagag 180 tctgtgattt tgtgtccagg gagtgttttg ggaatggaaa actggatccg catcactttc 240 gchattgatt catcttctct tcttgatggt cttgagagga tcaaatcttt ctgccaaagg 300 cataagaaga agaatttgct taatggccat taactgtatc tacgttcaaa gttacccagt 360 tccattgttt ttcattgtat catcaacaaa tgtggaactt tgaaatccct ctgaattaat 420 aaagttttcc ttg
- (2) INFORMATION FOR SEQ ID NO:3652:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 110 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..110
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577679

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3652:

Ile Ile Gly Leu Leu Ala Glu Thr Ser Glu Ile Cys Tyr Arg Glu Ile 1 5 10 15

Lys Asp Ile Lys Cys Ile Thr Cys Pro His Lys Pro Glu Gly Ser Met 20 25 30

Phe Val Met Val Lys Leu Asn Leu Tyr Leu Leu Glu Gly Ile His Asp 35 40 45

Asp Ile Asp Phe Cys Cys Lys Leu Ala Lys Glu Glu Ser Val Ile Leu 50 55 60

Cys Pro Gly Ser Val Leu Gly Met Glu Asn Trp Ile Arg Ile Thr Phe 70 75 80

Xaa Ile Asp Ser Ser Ser Leu Leu Asp Gly Leu Glu Arg Ile Lys Ser 90 85 Phe Cys Gln Arg His Lys Lys Lys Asn Leu Leu Asn Gly His 105 100 (2) INFORMATION FOR SEQ ID NO:3653: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 79 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..79 (D) OTHER INFORMATION: / Ceres Seq. ID 1577680 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3653: Met Phe Val Met Val Lys Leu Asn Leu Tyr Leu Leu Glu Gly Ile His 10 5 Asp Asp Ile Asp Phe Cys Cys Lys Leu Ala Lys Glu Glu Ser Val Ile 30 20 25 Leu Cys Pro Gly Ser Val Leu Gly Met Glu Asn Trp Ile Arg Ile Thr 40 Phe Xaa Ile Asp Ser Ser Ser Leu Leu Asp Gly Leu Glu Arg Ile Lys 55 Ser Phe Cys Gln Arg His Lys Lys Lys Asn Leu Leu Asn Gly His 75 70 (2) INFORMATION FOR SEQ ID NO:3654: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 76 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..76 (D) OTHER INFORMATION: / Ceres Seq. ID 1577681 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3654: Met Val Lys Leu Asn Leu Tyr Leu Leu Glu Gly Ile His Asp Asp Ile 10 5 Asp Phe Cys Cys Lys Leu Ala Lys Glu Glu Ser Val Ile Leu Cys Pro 25 Gly Ser Val Leu Gly Met Glu Asn Trp Ile Arg Ile Thr Phe Xaa Ile 45 40 Asp Ser Ser Ser Leu Leu Asp Gly Leu Glu Arg Ile Lys Ser Phe Cys 55 Gln Arg His Lys Lys Asn Leu Leu Asn Gly His 70 (2) INFORMATION FOR SEQ ID NO: 3655: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 1045 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE:

(D) OTHER INFORMATION: / Ceres Seq. ID 1577688

(A) NAME/KEY: -

(B) LOCATION: 1..1045

ccgcagcagc agcagctggg gagcaccgct tcgttccact cgacacccat tctgcagcgg aagcacaaga cccagtggca caacagattc aactattata cgagacgtag gaggaaccga 180 gaaactaaaa ggtcaatgct acggaacatg tcagaatatg cagagtctct ctttcagagt 240 tggcgtgatg aagatgagaa aaatgctgca tctgctgggc cttcatggtt tagaggacat 300 cgttgggtca gaaattcaag caacaatggt ttccgtacac acgattttta ttacgggaat 360 420 ttcaaaagca aaggaggatt tgagttttgc acaagtgatg aggatgaacc agagaatctg tttcgtaatg tttttcgaga ccagcacaca tattattggt ctttttcatc tgataatttt 480 cagagGaact ccaaacgtgc tcgctcacaa aaatccagaa actggagttt tgaaacagac 540 gaggaggatg aagtatcagc tccatcagag gtatctttgg cacgacaagc tcttgggttg 600 660 agcacttctg gtccgcttaa acttgaagat gttaaaagcg cataccgagc atgtgcactt agatggcatc cagatcgcca caatggatca tctaagtcta cagcggagga gaaattcaag 720 cattgcagtg cagcatacaa gaccttatgt gatagtttgg ccgctgcata gataattttg 780 aatgaagatg gactctggat gagccccttc caaactttct agctgcaaat tctgaagagc 840 900 tgccacatgc ttgtggtagc tccgaccatc ccaatcccaa gaggcgggag tcgcatttct tggttattga ggcgattgag tcaattcaaa attgaccgga taatatatgt actgtaccgt 960 gtaaaatttt ttgtcacagc tcattgttgt attattttta tagatatgaa gatattgttc 1020 acaccactca ataaattttc ttggc

- (2) INFORMATION FOR SEQ ID NO:3656:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 256 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

195

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..256
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577689

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3656: Ile Lys Ser Ala Ile Phe Ser Gly His Arg Ser His Pro His Val Gly 10 Ala Ala Ala Val Pro Gln Gln Gln Leu Gly Ser Thr Ala Ser Phe 25 2.0 His Ser Thr Pro Ile Leu Gln Arg Lys His Lys Thr Gln Trp His Asn 40 Arg Phe Asn Tyr Tyr Thr Arg Arg Arg Arg Asn Arg Glu Thr Lys Arg Ser Met Leu Arg Asn Met Ser Glu Tyr Ala Glu Ser Leu Phe Gln Ser 75 70 Trp Arg Asp Glu Asp Glu Lys Asn Ala Ala Ser Ala Gly Pro Ser Trp 90 85 Phe Arg Gly His Arg Trp Val Arg Asn Ser Ser Asn Asn Gly Phe Arg 110 105 100 Thr His Asp Phe Tyr Tyr Gly Asn Phe Lys Ser Lys Gly Gly Phe Glu 125 120 115 Phe Cys Thr Ser Asp Glu Asp Glu Pro Glu Asn Leu Phe Arg Asn Val 140 135 Phe Arg Asp Gln His Thr Tyr Tyr Trp Ser Phe Ser Ser Asp Asn Phe 155 150 Gln Arg Asn Ser Lys Arg Ala Arg Ser Gln Lys Ser Arg Asn Trp Ser 170 165 Phe Glu Thr Asp Glu Glu Asp Glu Val Ser Ala Pro Ser Glu Val Ser 185 180 Leu Ala Arg Gln Ala Leu Gly Leu Ser Thr Ser Gly Pro Leu Lys Leu

200

215

230

245

Glu Asp Val Lys Ser Ala Tyr Arg Ala Cys Ala Leu Arg Trp His Pro

Asp Arg His Asn Gly Ser Ser Lys Ser Thr Ala Glu Glu Lys Phe Lys

His Cys Ser Ala Ala Tyr Lys Thr Leu Cys Asp Ser Leu Ala Ala Ala

205

220

235

250

```
(2) INFORMATION FOR SEQ ID NO:3657:
    (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 199 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
         (B) LOCATION: 1..199
         (D) OTHER INFORMATION: / Ceres Seq. ID 1577690
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3657:
Ser Ser Arg Leu Ser Ser Pro Ala Ile Gly Arg Thr Pro Thr Trp Gly
                                  10
Arg Arg Arg Ser Arg Ser Ser Ser Trp Gly Ala Pro Leu Arg Ser
                              25
Thr Arg His Pro Phe Cys Ser Gly Ser Thr Arg Pro Ser Gly Thr Thr
                           40
Asp Ser Thr Ile Ile Arg Asp Val Gly Gly Thr Glu Lys Leu Lys Gly
                       55
   50
Gln Cys Tyr Gly Thr Cys Gln Asn Met Gln Ser Leu Ser Phe Arg Val
                                      75
Gly Val Met Lys Met Arg Lys Met Leu His Leu Leu Gly Leu His Gly
                                  90
Leu Glu Asp Ile Val Gly Ser Glu Ile Gln Ala Thr Met Val Ser Val
                              105 110
            100
His Thr Ile Phe Ile Thr Gly Ile Ser Lys Ala Lys Glu Asp Leu Ser
                          120
                                              125
        115
Phe Ala Gln Val Met Arg Met Asn Gln Arg Ile Cys Phe Val Met Phe
                                          140
                   135
Phe Glu Thr Ser Thr His Ile Ile Gly Leu Phe His Leu Ile Ile Phe
                                   155
            150
Arg Gly Thr Pro Asn Val Leu Ala His Lys Asn Pro Glu Thr Gly Val
                                                       175
                                   170
            165
Leu Lys Gln Thr Arg Arg Met Lys Tyr Gln Leu His Gln Arg Tyr Leu
        180
                               185
Trp His Asp Lys Leu Leu Gly
        195
(2) INFORMATION FOR SEQ ID NO: 3658:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 191 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
           (B) LOCATION: 1..191
           (D) OTHER INFORMATION: / Ceres Seq. ID 1577691
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3658:
Met Leu Arg Asn Met Ser Glu Tyr Ala Glu Ser Leu Phe Gln Ser Trp
                                    10
Arg Asp Glu Asp Glu Lys Asn Ala Ala Ser Ala Gly Pro Ser Trp Phe
                               25
            20
Arg Gly His Arg Trp Val Arg Asn Ser Ser Asn Asn Gly Phe Arg Thr
                           40
 His Asp Phe Tyr Tyr Gly Asn Phe Lys Ser Lys Gly Gly Phe Glu Phe
                                          60
                       55
 Cys Thr Ser Asp Glu Asp Glu Pro Glu Asn Leu Phe Arg Asn Val Phe
```

```
75
                                                             80
                    70
65
Arg Asp Gln His Thr Tyr Tyr Trp Ser Phe Ser Ser Asp Asn Phe Gln
                                    90
                85
Arg Asn Ser Lys Arg Ala Arg Ser Gln Lys Ser Arg Asn Trp Ser Phe
                                105
            100
Glu Thr Asp Glu Glu Asp Glu Val Ser Ala Pro Ser Glu Val Ser Leu
                                                 125
                            120
        115
Ala Arg Gln Ala Leu Gly Leu Ser Thr Ser Gly Pro Leu Lys Leu Glu
                        135
                                             140
Asp Val Lys Ser Ala Tyr Arg Ala Cys Ala Leu Arg Trp His Pro Asp
                    150
                                        155
Arg His Asn Gly Ser Ser Lys Ser Thr Ala Glu Glu Lys Phe Lys His
                                    170
                165
Cys Ser Ala Ala Tyr Lys Thr Leu Cys Asp Ser Leu Ala Ala Ala
            180
                                185
```

- (2) INFORMATION FOR SEQ ID NO:3659:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 875 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..875
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577698
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3659: atcgggtgcc cattggccac tggcccctag ccctcgccct cccttttcta ttgctccgaa 60 120 gcccgagttg cgagctgtct cctccactct tctccttcac tgtcgcagcc gccccttgta gaagettega ggetgetget getgegeeca tggeegegga aggeaagaeg eegteeeteg 180 240 ccgaggagta ttcacttcca ccacaggaag ttccagtgga aaaggcagct gaggagaagc cctctagtgg tactgagtct gaagctgctc cctcaaccCa atgatgaaac tcctccatct 300 360 gtagaagaca agaatggaac ttctgaagta caagatgctg ctgaaaatcc agaggcagaa 420 qaaactaaca ctqctqcaga ggaaacacct gctgtagagg aagcaagtga gactaccgag gaggaagagg ctgagaaacc tgagatcaag atcgaaacag ctccagcaga ttttcgtttc 480 ccaacaacaa accaaacaag gcattgtttc acacgctatg ttgaatatca caggtgtgtg 540 gctgcaaaag gtgaggatgc acctgagtgt gataagttcg ccaagtacta tcgatccctg 600 tgcccaggtg aatgggttga tcgctggaac gagcaacgcg aaaacggcac cttccctgga 660 cctctgtaat cctacaatgc aaaagaagta tgaactcacg atgttgtgcc ggcttctctt 720 ccttggtaac tggcgccaag ttaccttttt tggagctctc tacagaataa gaaatccctt 780 ttggcttgaa gaatgccctg ttgctcttcc taacggtcat gttgtgcgct gctgagaaac 840 tagcgtcaca gttaacaatt ttctttatac agttc
- (2) INFORMATION FOR SEQ ID NO: 3660:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 93 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..93
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577699
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3660:
- Arg Val Pro Ile Gly His Trp Pro Leu Ala Leu Ala Leu Pro Phe Leu 1 5 10 15
- Leu Leu Arg Ser Pro Ser Cys Glu Leu Ser Pro Pro Leu Phe Ser Phe 20 25 30
- Thr Val Ala Ala Ala Pro Cys Arg Ser Phe Glu Ala Ala Ala Ala Ala 35 40 45
- Pro Met Ala Ala Glu Gly Lys Thr Pro Ser Leu Ala Glu Glu Tyr Ser

60 55 50 Leu Pro Pro Gln Glu Val Pro Val Glu Lys Ala Ala Glu Glu Lys Pro 75 70 Ser Ser Gly Thr Glu Ser Glu Ala Ala Pro Ser Thr Gln 85 (2) INFORMATION FOR SEQ ID NO:3661: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 105 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..105 (D) OTHER INFORMATION: / Ceres Seq. ID 1577700 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3661: Met Leu Asn Ile Thr Gly Val Trp Leu Gln Lys Val Arg Met His Leu 10 5 Ser Val Ile Ser Ser Pro Ser Thr Ile Asp Pro Cys Ala Gln Val Asn 25 20 Gly Leu Ile Ala Gly Thr Ser Asn Ala Lys Thr Ala Pro Ser Leu Asp 4.0 Leu Cys Asn Pro Thr Met Gln Lys Lys Tyr Glu Leu Thr Met Leu Cys 55 50 Arg Leu Leu Phe Leu Gly Asn Trp Arg Gln Val Thr Phe Phe Gly Ala 75 70 Leu Tyr Arg Ile Arg Asn Pro Phe Trp Leu Glu Glu Cys Pro Val Ala 85 Leu Pro Asn Gly His Val Val Arg Cys 100 (2) INFORMATION FOR SEQ ID NO: 3662: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 92 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..92 (D) OTHER INFORMATION: / Ceres Seq. ID 1577701 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3662: Met His Leu Ser Val Ile Ser Ser Pro Ser Thr Ile Asp Pro Cys Ala 10 5 Gln Val Asn Gly Leu Ile Ala Gly Thr Ser Asn Ala Lys Thr Ala Pro 25 Ser Leu Asp Leu Cys Asn Pro Thr Met Gln Lys Lys Tyr Glu Leu Thr 40 Met Leu Cys Arg Leu Leu Phe Leu Gly Asn Trp Arg Gln Val Thr Phe 55 Phe Gly Ala Leu Tyr Arg Ile Arg Asn Pro Phe Trp Leu Glu Glu Cys 75 70 Pro Val Ala Leu Pro Asn Gly His Val Val Arg Cys 85 (2) INFORMATION FOR SEQ ID NO:3663: (i) SEQUENCE CHARACTERISTICS:

- - (A) LENGTH: 1009 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1009
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577714
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3663:

gtcgctctcc gaactctgat tgaggaggag tgaagcttct tttcttcttc ctccaqtcat 60 120 cccattgcaa aagtagaagc agggaaggaa ttggaagcat gaacaagcag cagcaggcgt acgggtacgg aaatgggcag caggccgacg tcccaggcta ctgctgtttc catccccggg 180 aggteggegt eggegtetge geteaetgee teaaggateg ceteeteete eteetegeeg 240 ctgccaacaa caataagatc gacgacgacg cccgccgcaa aagcaggagc aggagcagga 300 gcatetecet ecceaaggte ttegegeteg geteeteett ecteeagege etegaeteee 360 gccaccaccg gggacgaggg cgggacaaca actgctactc cgacgacgac gacgccaccg 420 cctccgtcgc aagcctcgat gattccttca tctccatcaa attcgaggac aacggcaagg 480 cgacgtggga cagccagagc cagcacaagg cggcagCtcc cgcgaggtct cgtcgacgac 540 gaccatggta gcggtggagc acgtcaagcg tktcggcgtc acccggtggc gcaaacaggt 600 ggtgggccgc atgctgcagc tggcgcgctg gaggaggtcg tccgctgctg cgggtgggct 660 ggacggcaag aaggcggcgg cggcggcggc tgagcggtcc aaggccagag ggagaggctg 720 gatceggage eteactegga ggegegegea eggggacegg gegtggtagg tegeegtegt 780 cggtaaggag gcccggtcgg tcggggggg ggcagcccat gcatgcatgc atggtgtccg 840 atggatggat ggatctgcga gcttcccccc ttgctttgga tggagacgta gtaattgctt 900 gcttgtgctt tgtaccaagt gagatgagtg agtgcctcct tttacctact ataggctact 960 atacgtacag ttaatagcag ctagctgttg gtgtggattg ctatgcgtg

- (2) INFORMATION FOR SEQ ID NO:3664:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 150 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..150
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577715
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3664:
- Met Asn Lys Gln Gln Gln Ala Tyr Gly Tyr Gly Asn Gly Gln Gln Ala 1 5 10 15
- Asp Val Pro Gly Tyr Cys Cys Phe His Pro Arg Glu Val Gly Val Gly 20 25 30
- Val Cys Ala His Cys Leu Lys Asp Arg Leu Leu Leu Leu Ala Ala 35 40 45
- Ala Asn Asn Lys Ile Asp Asp Asp Ala Arg Arg Lys Ser Arg Ser 50 55 60
- Arg Ser Arg Ser Ile Ser Leu Pro Lys Val Phe Ala Leu Gly Ser Ser 65 70 75 80
- Phe Leu Gln Arg Leu Asp Ser Arg His His Arg Gly Arg Gly Arg Asp 85 90 95
- Asn Asn Cys Tyr Ser Asp Asp Asp Asp Ala Thr Ala Ser Val Ala Ser 100 105 110
- Leu Asp Asp Ser Phe Ile Ser Ile Lys Phe Glu Asp Asn Gly Lys Ala 115 120 125
- Thr Trp Asp Ser Gln Ser Gln His Lys Ala Ala Ala Pro Ala Arg Ser 130 135 140
- Arg Arg Arg Pro Trp 145 150
- (2) INFORMATION FOR SEQ ID NO: 3665:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 186 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..186 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3665:
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577716
- Met Gly Ser Arg Pro Thr Ser Gln Ala Thr Ala Val Ser Ile Pro Gly 10 5 Arg Ser Ala Ser Ala Ser Ala Leu Thr Ala Ser Arg Ile Ala Ser Ser 30

20 25 Ser Ser Ser Pro Leu Pro Thr Thr Ile Arg Ser Thr Thr Thr Pro Ala 45

40 Ala Lys Ala Gly Ala Gly Ala Gly Ala Ser Pro Ser Pro Arg Ser Ser

60 55 Arg Ser Ala Pro Pro Ser Ser Ser Ala Ser Thr Pro Ala Thr Thr Gly

75 70 Asp Glu Gly Gly Thr Thr Thr Ala Thr Pro Thr Thr Thr Pro Pro 90

85 Pro Pro Ser Gln Ala Ser Met Ile Pro Ser Ser Pro Ser Asn Ser Arg 105

Thr Thr Ala Arg Arg Arg Gly Thr Ala Arg Ala Ser Thr Arg Arg Gln 125 120

Leu Pro Arg Gly Leu Val Asp Asp Asp His Gly Ser Gly Gly Ala Arg 135 140

Gln Ala Xaa Arg Arg His Pro Val Ala Gln Thr Gly Gly Pro His 155 150

Ala Ala Ala Gly Ala Leu Glu Glu Val Val Arg Cys Cys Gly Trp Ala 170

Gly Arg Gln Glu Gly Gly Gly Gly Gly 180

- (2) INFORMATION FOR SEQ ID NO: 3666:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 588 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..588
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577717
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3666: aactaggcaa ctactccgtc tcacgcctct cctgtcccct ctcgccgCtc tcgccccgcc 60 tetgecteeg cetectecat egeacceage titeeteece accecaceae cactectace 120 cegecaegte gtgtagtege ggeggeggat atgeaggeeg cegeegeett caaccaggea 180 geetteaceg ecegeteget geategeece eegaggeece tecacetage tgttgeggag 240 gatgcttttg cggggataag aggcgcgcct tttacacggc cccggtgctg cgggagcctc 300 tctgtcggcg tcggcagcta caacagcgag cacactccag tatttccaag acaacaatca 360 tgggatccct acaagcttct tggtgttgat caagatgcat ctgaagaaga ggtccggagt 420 gcacggaatt ttcttctaaa acaatacgcc ggatatgaag aaagtgaaga ggccattgaa 480 ggtgcttatg acaagataat aatgaatagc tacacagacc gtaagaaatc caaattcaat 540 ctgaaaagca agctaaaaga gcaagttgaa ggatccccat catggctt
- (2) INFORMATION FOR SEQ ID NO:3667:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

(B) LOCATION: 1..128

(D) OTHER INFORMATION: / Ceres Seq. ID 1577718

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3667:

Leu Gly Asn Tyr Ser Val Ser Arg Leu Ser Cys Pro Leu Ser Pro Leu

1 5 10 15

Ser Pro Arg Leu Cys Leu Arg Leu Leu His Arg Thr Gln Leu Ser Ser

20 25 30
Pro Pro His His Ser Tyr Pro Ala Thr Ser Cys Ser Arg Gly Gly

Pro Pro His His Ser Tyr Pro Ala Thr Ser Cys Ser Arg Gly Gly

35

40

45

45

Clar Car Lea His Arg Bro

Gly Tyr Ala Gly Arg Arg Leu Gln Pro Gly Ser Leu His Arg Pro 50 55 60

Leu Ala Ala Ser Pro Pro Glu Ala Pro Pro Pro Ser Cys Cys Gly Gly 65 70 75 80

Cys Phe Cys Gly Asp Lys Arg Arg Ala Phe Tyr Thr Ala Pro Val Leu 85 90 95

Arg Glu Pro Leu Cys Arg Arg Gln Leu Gln Gln Arg Ala His Ser

Ser Ile Ser Lys Thr Thr Ile Met Gly Ser Leu Gln Ala Ser Trp Cys
115 120 125

- (2) INFORMATION FOR SEQ ID NO:3668:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 146 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..146
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577719
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3668:

Met Gln Ala Ala Ala Ala Phe Asn Gln Ala Ala Phe Thr Ala Arg Ser 1 5 10 15

Leu His Arg Pro Pro Arg Pro Leu His Leu Ala Val Ala Glu Asp Ala 20 25 30

Phe Ala Gly Ile Arg Gly Ala Pro Phe Thr Arg Pro Arg Cys Cys Gly 35 40 45

Ser Leu Ser Val Gly Val Gly Ser Tyr Asn Ser Glu His Thr Pro Val
50 55 60

Phe Pro Arg Gln Gln Ser Trp Asp Pro Tyr Lys Leu Leu Gly Val Asp 65 70 75 80
Gln Asp Ala Ser Glu Glu Glu Val Arg Ser Ala Arg Asn Phe Leu Leu

85 90 95
Lys Gln Tyr Ala Gly Tyr Glu Glu Ser Glu Glu Ala Ile Glu Gly Ala

100 105 110 Tyr Asp Lys Ile Ile Met Asn Ser Tyr Thr Asp Arg Lys Lys Ser Lys

115 120 125
Phe Asn Leu Lys Ser Lys Leu Lys Glu Gln Val Glu Gly Ser Pro Ser
130 135 140

130 Trp Leu

145

- (2) INFORMATION FOR SEQ ID NO:3669:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 790 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..790
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577737
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3669: tatttttcta agcatggaag ggtggttggt tgccatgttg ttcttgaacc ccatacacgt 60 120 gtttcccgtg gatttgcctt tgtcagcatg gacactgttg aagaagcgga sswtgcataa agtatettaa tggttetgta atggaaggte gaaacateae agttgaaaag teaegeegtg 180 240 gtcgcccaag gacaccaact cctggaagct atcttggcca tcggtacgag cgtagggagc 300 gtgggaggtt ccatagaggc tatggtggtg ggcgtgatga gtattacggc aatggcggcg 360 gegggtatgg ctaccgcagG tetecgeete ceatgtacte tteetacagg gagagteggg attattatcc ctcctacaag gacagccggg actaccctcc ctacagggac ggcagggact 420 480 actetectee ccaeagggae cetegggaet actaegaaag caggggtgge eggggetaet 540 cgccgcctcc ttatggtggt ggtaggtcaa ggagggaccg antcggtttc accgtatcgg 600 atgccagaaa ggggctacgg tggaggccgc cgggtgggtg gcggcggata tgacaggtaa tgtagaggtt ttctctccgc cggtggctgc tgctgcgatg gctgcgtatg gctctcgcag 660 ctctggtgat atggttagac tgctgcctgt agctgtgtac ttggtgtact gtcttcccgc 720 gtatgtggat ttggtgaaaa cttctgtatg agcacctttt atttgtagcc tgcaatgatt 780 ccttcttaag
- (2) INFORMATION FOR SEQ ID NO:3670:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 150 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..150
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577738
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3670: Met Glu Gly Arg Asn Ile Thr Val Glu Lys Ser Arg Arg Gly Arg Pro 10 5 Arg Thr Pro Thr Pro Gly Ser Tyr Leu Gly His Arg Tyr Glu Arg Arg 30 20 Glu Arg Gly Arg Phe His Arg Gly Tyr Gly Gly Gly Arg Asp Glu Tyr 40 Tyr Gly Asn Gly Gly Gly Tyr Gly Tyr Arg Arg Ser Pro Pro 60 55 50 Met Tyr Ser Ser Tyr Arg Glu Ser Arg Asp Tyr Tyr Pro Ser Tyr Lys 75 70 Asp Ser Arg Asp Tyr Pro Pro Tyr Arg Asp Gly Arg Asp Tyr Ser Pro 90 85 Pro His Arg Asp Pro Arg Asp Tyr Tyr Glu Ser Arg Gly Gly Arg Gly 110 105 100 Tyr Ser Pro Pro Pro Tyr Gly Gly Gly Arg Ser Arg Arg Asp Arg Xaa 125 120 Gly Phe Thr Val Ser Asp Ala Arg Lys Gly Leu Arg Trp Arg Pro Pro 135 140
- Gly Gly Trp Arg Arg Ile
- 145 150
- (2) INFORMATION FOR SEQ ID NO:3671:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 112 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..112
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577739

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3671: Met Val Val Gly Val Met Ser Ile Thr Ala Met Ala Ala Ala Gly Met 10 Ala Thr Ala Gly Leu Arg Leu Pro Cys Thr Leu Pro Thr Gly Arg Val 25 Gly Ile Ile Ile Pro Pro Thr Arg Thr Ala Gly Thr Thr Leu Pro Thr 40 Gly Thr Ala Gly Thr Thr Leu Leu Pro Thr Gly Thr Leu Gly Thr Thr 55 Thr Lys Ala Gly Val Ala Gly Ala Thr Arg Arg Leu Leu Met Val Val 75 70 Val Gly Gln Gly Gly Thr Xaa Ser Val Ser Pro Tyr Arg Met Pro Glu 90 85 Arg Gly Tyr Gly Gly Gly Arg Arg Val Gly Gly Gly Tyr Asp Arg 105 110 100

- (2) INFORMATION FOR SEQ ID NO:3672:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 107 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..107
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577740

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3672: Met Ser Ile Thr Ala Met Ala Ala Gly Met Ala Thr Ala Gly Leu

1 5 10 15
Arg Leu Pro Cys Thr Leu Pro Thr Gly Arg Val Gly Ile Ile Pro 20 25 30

Pro Thr Arg Thr Ala Gly Thr Thr Leu Pro Thr Gly Thr Ala Gly Thr 35 40 45

Thr Leu Leu Pro Thr Gly Thr Leu Gly Thr Thr Thr Lys Ala Gly Val 50 55 60

Ala Gly Ala Thr Arg Arg Leu Leu Met Val Val Val Gly Gln Gly G5 70 75 80

Thr Xaa Ser Val Ser Pro Tyr Arg Met Pro Glu Arg Gly Tyr Gly Gly 85 90 95

- Gly Arg Arg Val Gly Gly Gly Gly Tyr Asp Arg
- (2) INFORMATION FOR SEQ ID NO:3673:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 926 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..926
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577749
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3673:

aaaagatete ageegeegte gteteegteg eteegeegea eeteeeeeea teaeegeete 60 actaaaacee taateeetag eegeeatge ggetgttgeg geggeeacet egeaeeteet 120 aegeeaceae egeaaceee acetteteet eeteegegea gantneteat eeteeegge 180 tttaceeegg etgeegeeea eteeeteeaa aceeeageae ggggageeee ttetacacee agaactggeg 240 egeggeeeea eteeeteeaa aceeeageae ggggageeee ttetacacee agaactggeg 240 caaceeagee gemgeeaace egsmeteete gettetgeme amegtegteg emggmageme 360

cttcggggcg cagCacttca tggccgcctt ctacgatgca cccgacgtca cggggctcaa 420 ggagacgttc gccaagtata tggcggagCa gcggtgggaa gacatgaagc acctgttcga 480 ccactgggtg cgctccctcg acgccgccac ggggaagccc aaccaccccg acgtcgacct 540 600 cttcaatcac tacctccgcg ccaacctcat gaccagggcc ctgccgcacg agatgctcga totogotgac cacatgotog agttogagot coaacccaac actgoatogt acaacctogt 660 gctcaagagc atggtcgcca gccaggagac cgagggcgcc gagaagctca ttgaacggtg 720 agtgcgctat tcttgtacgg gcggcattgt cgttgccaat gaggcattct gatttctgtt 780 840 ccggcaccta gttttgttta ccgtacttat aggtgacgac ctataatggt ataacctgta aaacccggtg gccactgacg tttggcattg acgtgaggat atgcagcaag ctcaaatgcg 900 gtaatgagaa gaggacacgt tcttct

- (2) INFORMATION FOR SEQ ID NO:3674:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 202 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..202
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577750
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3674:

Lys Arg Ser Gln Pro Pro Ser Ser Pro Ser Leu Arg Arg Thr Ser Pro 1 5 10 15

His His Arg Leu Thr Lys Thr Leu Ile Pro Ser Arg His Gly Gly Cys 20 25 30

Cys Gly Gly His Leu Ala Pro Pro Thr Pro Pro Pro Gln Pro Pro Pro 35 40 45

Ser Pro Pro Pro Arg Arg Xaa Leu Ile Leu Pro Cys Phe Thr Pro Ala 50 55 60

Ala Gly Ala Val Pro Arg Pro Asp Arg Arg His Pro Arg Pro Arg Arg 65 70 70 75 80 Arg Gly Pro Thr Pro Ser Lys Pro Gln His Gly Glu Pro Leu Leu His

85 90 95

Pro Glu Leu Ala Gln Pro Ser Arg Xaa Gln Pro Xaa Leu Leu Ala Ser

100 105 110 Xaa Xaa Arg Arg Arg Xaa Xaa Xaa Leu Arg Gly Ala Ala Leu His Gly

115 120 125 Arg Leu Leu Arg Cys Thr Arg Arg His Gly Ala Gln Gly Asp Val Arg

130 135 140 Gln Val Tyr Gly Gly Ala Ala Val Gly Arg His Glu Ala Pro Val Arg

145 150 155 160
Pro Leu Gly Ala Leu Pro Arg Arg Arg His Gly Glu Ala Gln Pro Pro
165 170 175

Arg Arg Arg Pro Leu Gln Ser Leu Pro Pro Arg Gln Pro His Asp Gln 180 185 190

- Gly Pro Ala Ala Arg Asp Ala Arg Ser Arg 195 200
- (2) INFORMATION FOR SEQ ID NO:3675:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 211 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..211
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577751
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3675:
- Met Ala Ala Val Ala Ala Ala Thr Ser His Leu Leu Arg His His Arg

10 Asn Pro His Leu Leu Leu Arg Ala Xaa Xaa Ser Ser Ser Arg Ala 20 25 30 Leu Pro Gln Gln Pro Glu Leu Ser Pro Asp Pro Thr Ala Gly Thr Pro 40 Asp Leu Ala Gly Ala Ala Pro Leu Pro Pro Asn Pro Ser Thr Gly Ser 55 Pro Phe Tyr Thr Gln Asn Trp Arg Asn Pro Ala Xaa Ala Asn Pro Xaa 70 75 Ser Ser Leu Leu Xaa Xaa Val Val Xaa Xaa Ser Xaa Phe Gly Ala Gln 85 90 His Phe Met Ala Ala Phe Tyr Asp Ala Pro Asp Val Thr Gly Leu Lys 100 105 Glu Thr Phe Ala Lys Tyr Met Ala Glu Gln Arg Trp Glu Asp Met Lys 120 125 115 His Leu Phe Asp His Trp Val Arg Ser Leu Asp Ala Ala Thr Gly Lys 130 135 140 Pro Asn His Pro Asp Val Asp Leu Phe Asn His Tyr Leu Arg Ala Asn 150 155 160 Leu Met Thr Arg Ala Leu Pro His Glu Met Leu Asp Leu Ala Asp His 165 170 175 Met Leu Glu Phe Glu Leu Gln Pro Asn Thr Ala Ser Tyr Asn Leu Val 180 185 190 Leu Lys Ser Met Val Ala Ser Gln Glu Thr Glu Gly Ala Glu Lys Leu 200 Ile Glu Arg 210

- (2) INFORMATION FOR SEQ ID NO:3676:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 113 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..113
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577752
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3676:
- Met Ala Ala Phe Tyr Asp Ala Pro Asp Val Thr Gly Leu Lys Glu Thr 1 5 10 15
- Phe Ala Lys Tyr Met Ala Glu Gln Arg Trp Glu Asp Met Lys His Leu 20 25 30
- Phe Asp His Trp Val Arg Ser Leu Asp Ala Ala Thr Gly Lys Pro Asn 35 40 45
- His Pro Asp Val Asp Leu Phe Asn His Tyr Leu Arg Ala Asn Leu Met 50 55 60
- Thr Arg Ala Leu Pro His Glu Met Leu Asp Leu Ala Asp His Met Leu 65 70 75 80
- Glu Phe Glu Leu Gln Pro Asn Thr Ala Ser Tyr Asn Leu Val Leu Lys 85 90 95
- Ser Met Val Ala Ser Gln Glu Thr Glu Gly Ala Glu Lys Leu Ile Glu 100 105 110

Arg

- (2) INFORMATION FOR SEQ ID NO:3677:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1017 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1017
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577771
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3677: cccgctaccc aaatctctcc gtccacggcg acgccagacg gcatccgtca gccagcaaca 60 tetecaccae accetecceg teccegacga agaageacag eggagaggeg geegaageeg 120 acgcctcacc aagtcaccag tagcttctcc gcgctcgtgc gsccttcccg cacttggatg 180 240 ctccctgcgc cggcgcctag agcggcggcc gtctagcggg cgcccggagg tgaacccacc gatggccgac gctctccttc cacgccgctt cctcgcgccg ttgtcagtcg tatccggagc 300 ctetteatea geetettegt eeeegeegtg tetttgggtg etetegtege eeggeteeee 360 gegemggeeg egeetggegg eeggnteace egeaaceeeg gemtegeegn tteactegge 420 480 acaagctctg ccggacagct ttggagaacc ctgatatatt gtttctaaaa gtgaattttg 540 atgaaaacaa acctatgtgc aaacgactga atgtcaaagt cCttcctttc ttccatttt 600 atcgtggagc tgacgggcta cttgaggctt tctcctgttc cttagctaag tttcagaagc tgaaggatgc cattgcaatg cacaacactg ctcgttgcag cattggtcca cctgttggag 660 ttggcgatgt tgacttgctg gataacgcga gccctcaaga gaaacctgca gaagctagcc 720 cacggtagat tcatgagaat gagctccacc tcatccactt ctacgtcctg ctcattgttt 780 tcttcactat agatctcaat gtaatcagtt gtggagaaca taagtagcct cggttcatga 840 atcagatgta tggattattg taacgcattc ttgaaaggga aaaacatgta ttatagcgtg 900 ataactgtac cttttgtgtt tgttgtacag aaccatagaa ttgtacttca ttttaggtga 960 agacgccttt gaacatttaa gctcccttgt gggccgtttt atagagtcag tcagtcc
- (2) INFORMATION FOR SEQ ID NO:3678:
 - (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 150 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..150
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577772
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3678:

 Pro Leu Pro Lys Ser Leu Arg Pro Arg Arg Gln Thr Ala Ser Val

 1 10 15

Ser Gln Gln His Leu His His Thr Leu Pro Val Pro Asp Glu Glu Ala 20 25 30

Gln Arg Arg Gly Gly Arg Ser Arg Arg Leu Thr Lys Ser Pro Val Ala 35 40 45

Ser Pro Arg Ser Cys Xaa Leu Pro Ala Leu Gly Cys Ser Leu Arg Arg 50 55 60

Arg Leu Glu Arg Arg Pro Ser Ser Gly Arg Pro Glu Val Asn Pro Pro 65 70 75 80

Met Ala Asp Ala Leu Leu Pro Arg Arg Phe Leu Ala Pro Leu Ser Val

Val Ser Gly Ala Ser Ser Ser Ala Ser Ser Ser Pro Pro Cys Leu Trp
100 105 110

Val Leu Ser Ser Pro Gly Ser Pro Arg Xaa Pro Arg Leu Ala Ala Xaa 115 120 125

Ser Pro Ala Thr Pro Xaa Ser Pro Xaa His Ser Ala Gln Ala Leu Pro 130 135 140

Asp Ser Phe Gly Glu Pro 145 150

- (2) INFORMATION FOR SEQ ID NO:3679:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..77 (D) OTHER INFORMATION: / Ceres Seq. ID 1577773 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3679: Met Cys Lys Arg Leu Asn Val Lys Val Leu Pro Phe Phe His Phe Tyr 10 Arg Gly Ala Asp Gly Leu Leu Glu Ala Phe Ser Cys Ser Leu Ala Lys 30 20 25 Phe Gln Lys Leu Lys Asp Ala Ile Ala Met His Asn Thr Ala Arg Cys 4.5 40 Ser Ile Gly Pro Pro Val Gly Val Gly Asp Val Asp Leu Leu Asp Asn 60 55 Ala Ser Pro Gln Glu Lys Pro Ala Glu Ala Ser Pro Arg 75 70 (2) INFORMATION FOR SEQ ID NO:3680: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 792 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..792 (D) OTHER INFORMATION: / Ceres Seq. ID 1577774 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3680: 60 aagatttgcc ttggcttgcc gtgccctgcg ggagccaagc caaggacggc tagcgctcgc cacgogogat gtccgggctt cctccggccg cgcgaccgct gctaccgtct ccctgcgcct 120 cttcctccgt tgttcgggcg aaggcagcgt cggcatgctg ctccagccta aagcagtcgc 180 gcccaggccg aagtgCtgcc gccccttcca ccgtcgccgC gcgtcaggcc gcgccgctct 240 tggctgcggc gctcgtcctt gtagcggcac cccctggcct gcctgctgct atctcaccag 300 catttgcaca gccagtttca gaaggcgcag Cgctgttccg gaaggcttgt attggttgcc 360 atgacatggg aggaaacatt ctacagccag gagccactct tttcctgaag gacctcgaga 420 qaaacggagt tgccacggag gaggaactgt ataacatcac atactatggg aaaggaagaa 480 tgcccggttt tggagagaaa tgcaccccaa gaggacagtg cacCttcggc ccccggctat 540 cggaagacga catcaagatc ctagctttgt ttgtcaagtc gcaagcccag aacgggtggc 600 cgaagattga gggggatgga gattgatcaa actgaaaaaa cgatgagaag acggtgcttg 660 ttagtcagat gaaaatggtg acgggaagat agtgtttgta tagtttagga atctggtctt 720 780 gtttcagttt tc (2) INFORMATION FOR SEQ ID NO:3681: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 120 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..120 (D) OTHER INFORMATION: / Ceres Seq. ID 1577775 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3681: Arg Phe Ala Leu Ala Cys Arg Ala Leu Arg Glu Pro Ser Gln Gly Arg 1.0 5 Leu Ala Leu Ala Thr Arg Asp Val Arg Ala Ser Ser Gly Arg Ala Thr

Ala Ala Thr Val Ser Leu Arg Leu Phe Leu Arg Cys Ser Gly Glu Gly 35 40 45

Ser Val Gly Met Leu Leu Gln Pro Lys Ala Val Ala Pro Arg Pro Lys

120

180

240

```
60
                       55
   50
Cys Cys Arg Pro Phe His Arg Arg Arg Ala Ser Gly Arg Ala Ala Leu
                                       75
                   70
Gly Cys Gly Ala Arg Pro Cys Ser Gly Thr Pro Trp Pro Ala Cys Cys
                                   90
               85
Tyr Leu Thr Ser Ile Cys Thr Ala Ser Phe Arg Arg Ser Ala Val
                              105
Pro Glu Gly Leu Tyr Trp Leu Pro
       115
(2) INFORMATION FOR SEQ ID NO: 3682:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 185 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..185
          (D) OTHER INFORMATION: / Ceres Seq. ID 1577776
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3682:
Met Ser Gly Leu Pro Pro Ala Ala Arg Pro Leu Leu Pro Ser Pro Cys
                                   10
              5
Ala Ser Ser Ser Val Val Arg Ala Lys Ala Ala Ser Ala Cys Cys Ser
                               25
           20
Ser Leu Lys Gln Ser Arg Pro Gly Arg Ser Ala Ala Pro Ser Thr
                            40
Val Ala Ala Arg Gln Ala Ala Pro Leu Leu Ala Ala Ala Leu Val Leu
                        55
Val Ala Ala Pro Pro Gly Leu Pro Ala Ala Ile Ser Pro Ala Phe Ala
                    70
Gln Pro Val Ser Glu Gly Ala Ala Leu Phe Arg Lys Ala Cys Ile Gly
                                    90
                85
Cys His Asp Met Gly Gly Asn Ile Leu Gln Pro Gly Ala Thr Leu Phe
                                                    110
                                105
            100
Leu Lys Asp Leu Glu Arg Asn Gly Val Ala Thr Glu Glu Glu Leu Tyr
                           120
Asn Ile Thr Tyr Tyr Gly Lys Gly Arg Met Pro Gly Phe Gly Glu Lys
                                            140
                        135
Cys Thr Pro Arg Gly Gln Cys Thr Phe Gly Pro Arg Leu Ser Glu Asp
                   150
                                       155
Asp Ile Lys Ile Leu Ala Leu Phe Val Lys Ser Gln Ala Gln Asn Gly
                                170
               165
Trp Pro Lys Ile Glu Gly Asp Gly Asp
                                185
            180
 (2) INFORMATION FOR SEQ ID NO:3683:
      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 923 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: single
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: DNA (genomic)
     (ix) FEATURE:
           (A) NAME/KEY: -
           (B) LOCATION: 1..923
           (D) OTHER INFORMATION: / Ceres Seq. ID 1577787
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3683:
 atacgccttt tctgcwgccg ctgcatcttc cactcgcgtc aagaaacgaa acccagctgc
 accagcaact tctgccagca gacccaacga ccgaagcttt tttttccctt tctttcatc
 gccgccgctc ggggttcaag gttcagcgcg tccccgaatg acgggcacgt acgargcctc
```

cgaccgtcct cctcctccca actccgccgg ccaccggacc gacaaagtcc ggcggaagcg

gctgacggcg cagaagagga aagagatcaa ggaggcgttc gacctcttcg acatcgacgg 300 ctccggcacc atcgatgcaa gggagctgaa cgtcgcgatg agagcccttg gattcgagat 360 gacaccggag caaatcgggc agatgatcgc ggaggtggac aaggacggca gcggcaccat 420 480 cgacttcgac gagttcgtgc acatgatgac ggacaagatg ggcgagcggg acgcccggga cgagctgcac aaggCgttcc gcatcatcga ccaggacgcc aacggaaaga tctcggacat 540 600 ggacatccag cggctggcca tcgagaccgg cgagcacttc acgctcgacg aggtccggga gatgatagag gccgccgacg aggacggcga cggcgagatc gacctggagg agttcatgaa 660 gatgatgaag cggacagact ttggctctgg gttctagtag tcacaggcaa gccaatccca 720 780 acatacatcc ccatcggtga aaaatacata tcacctacgc tacatatgac tggagtattg 840 ggatttattt gagaaataat ggcgtacaca caccatacat catagtgtac taactactgt aatatatgtg tagtgctgtc catgtacatc ctagctagct acggcttgtg tatttaccta 900 cacgtaatga aacacatatt act

- (2) INFORMATION FOR SEQ ID NO:3684:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 263 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..263
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577788
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3684:
- Ile Arg Leu Phe Cys Xaa Arg Cys Ile Phe His Ser Arg Gln Glu Thr
 1 10 15
- Lys Pro Ser Cys Thr Ser Asn Phe Cys Gln Gln Thr Gln Arg Pro Lys 20 25 30
- Leu Phe Phe Pro Phe Leu Phe Ile Ala Ala Ala Arg Gly Ser Arg Phe 35 40 45
- Ser Ala Ser Pro Asn Asp Gly His Val Arg Xaa Leu Arg Pro Ser Ser 50 55 60
- Ser Ser Gln Leu Arg Arg Pro Pro Asp Arg Gln Ser Pro Ala Glu Ala 65 70 75 80
- Ala Asp Gly Ala Glu Glu Glu Arg Asp Gln Gly Gly Val Arg Pro Leu 85 90 95
- Arg His Arg Arg Leu Arg His His Arg Cys Lys Gly Ala Glu Arg Arg
 100 105 110
- Asp Glu Ser Pro Trp Ile Arg Asp Asp Thr Gly Ala Asn Arg Ala Asp 115 120 125
- Asp Arg Gly Gly Gly Gln Gly Arg Gln Arg His His Arg Leu Arg Arg
- Val Arg Ala His Asp Asp Gly Gln Asp Gly Arg Ala Gly Arg Pro Gly
 145
 150
 155
 160
- Arg Ala Ala Gln Gly Val Pro His His Arg Pro Gly Arg Gln Arg Lys
 165 170 175

 Asp Leu Gly His Gly His Pro Ala Ala Gly His Arg Asp Arg Arg Ala
- 180 185 190

 Leu His Ala Arg Arg Gly Pro Gly Asp Asp Arg Gly Arg Arg Gly
 195 200 205
- Arg Arg Arg Asp Arg Pro Gly Gly Val His Glu Asp Asp Glu Ala
 210 215 220
- Asp Arg Leu Trp Leu Trp Val Leu Val Val Thr Gly Lys Pro Ile Pro 225 230 235 240
- Thr Tyr Ile Pro Ile Gly Glu Lys Tyr Ile Ser Pro Thr Leu His Met 245 250 255
- Thr Gly Val Leu Gly Phe Ile
 - 260
- (2) INFORMATION FOR SEQ ID NO:3685:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 231 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..231
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577789
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3685:
- Tyr Ala Phe Ser Xaa Ala Ala Ala Ser Ser Thr Arg Val Lys Lys Arg 1 5 10 15
- Asn Pro Ala Ala Pro Ala Thr Ser Ala Ser Arg Pro Asn Asp Arg Ser 20 25 30
- Phe Phe Pro Phe Phe Ser Ser Pro Pro Leu Gly Val Gln Gly Ser
- Ala Arg Pro Arg Met Thr Gly Thr Tyr Xaa Ala Ser Asp Arg Pro Pro 50 55 60
- Pro Pro Asn Ser Ala Gly His Arg Thr Asp Lys Val Arg Arg Lys Arg 65 70 75 80
- Leu Thr Ala Gln Lys Arg Lys Glu Ile Lys Glu Ala Phe Asp Leu Phe 85 90 95
- Asp Ile Asp Gly Ser Gly Thr Ile Asp Ala Arg Glu Leu Asn Val Ala 100 105 110
- Met Arg Ala Leu Gly Phe Glu Met Thr Pro Glu Gln Ile Gly Gln Met 115 120 125
- Ile Ala Glu Val Asp Lys Asp Gly Ser Gly Thr Ile Asp Phe Asp Glu 130 135 140
- Phe Val His Met Met Thr Asp Lys Met Gly Glu Arg Asp Ala Arg Asp 145 150 155 160
- Glu Leu His Lys Ala Phe Arg Ile Ile Asp Gln Asp Ala Asn Gly Lys
 165 170 175
- Ile Ser Asp Met Asp Ile Gln Arg Leu Ala Ile Glu Thr Gly Glu His 180 185 190
- Phe Thr Leu Asp Glu Val Arg Glu Met Ile Glu Ala Ala Asp Glu Asp 195 200 205
- Gly Asp Gly Glu Ile Asp Leu Glu Glu Phe Met Lys Met Met Lys Arg 210 215 220
- Thr Asp Phe Gly Ser Gly Phe 225 230
- (2) INFORMATION FOR SEQ ID NO:3686:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 179 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..179
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577790
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3686:
- Met Thr Gly Thr Tyr Xaa Ala Ser Asp Arg Pro Pro Pro Pro Asn Ser 1 5 10 15
- Ala Gly His Arg Thr Asp Lys Val Arg Arg Lys Arg Leu Thr Ala Gln
- Lys Arg Lys Glu Ile Lys Glu Ala Phe Asp Leu Phe Asp Ile Asp Gly
- Ser Gly Thr Ile Asp Ala Arg Glu Leu Asn Val Ala Met Arg Ala Leu 50 55 60
- Gly Phe Glu Met Thr Pro Glu Gln Ile Gly Gln Met Ile Ala Glu Val 65 70 75 80

```
Asp Lys Asp Gly Ser Gly Thr Ile Asp Phe Asp Glu Phe Val His Met
                                    90
Met Thr Asp Lys Met Gly Glu Arg Asp Ala Arg Asp Glu Leu His Lys
                               105
            100
Ala Phe Arg Ile Ile Asp Gln Asp Ala Asn Gly Lys Ile Ser Asp Met
                                               125
       115
                           120
Asp Ile Gln Arg Leu Ala Ile Glu Thr Gly Glu His Phe Thr Leu Asp
                                           140
                       135
Glu Val Arg Glu Met Ile Glu Ala Ala Asp Glu Asp Gly Asp Gly Glu
                                       155
                  150
Ile Asp Leu Glu Glu Phe Met Lys Met Met Lys Arg Thr Asp Phe Gly
                165
                                   170
Ser Gly Phe
```

- (2) INFORMATION FOR SEQ ID NO:3687:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 729 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..729
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577807
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3687: accaggcacg ccagcctcac tececagace aceteacacg caegaagcat cagcagtgga 60 ctggactagc tctaggtggg caacatgaag cttcagacca ccgtcaccgt tgctggcctc 120 ctcctcttcc tcctcctcct ggcgctgcct tccctccgsg tctccatggc tggatcaggg 180 240 ttctgcgamg gctgcaagga cgagttcgtc gcgtgggaga agtgcgtgga ggagacggat gccgcggatg ccagcattga cgtcgtggag cggtgccaag acgtcacggc Cgcgctgcgg 300 aagGtgGcat ggacgcgCca cgccgcbtac tacgagccta tcctccgggc cgagcgccc 360 atggctgcgg acctcgnagc tttcaggccc aagaagccgc ctccgactcc gcggcgtcgg 420 aggaaggcca gaaggaggcg gcagcggcgg ccgaggcagc gccgcgtccg tcagacgaag 480 gccagaataa gcaggtggct gaggcggcag ttgcggagga gagcagagat cctgcagcct 540 gattgggcga aaaaaggcag cggcgtcttc aattttttgt gagggatttg aggatatgaa 600 ttccgtttgt accttaggag agcatcaatt aacattttgt gagggggata gatttctgtc 660 cttttctctt tacatgaaac atgtgattct attgattgaa aaccaaaatt gtccactttt 720 gccagatgc
- (2) INFORMATION FOR SEQ ID NO:3688:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 85 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..85
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577808
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3688:
- Gln Ala Arg Gln Pro His Ser Pro Asp His Leu Thr Arg Thr Lys His

 1 5 10 15
- Gln Gln Trp Thr Gly Leu Ala Leu Gly Gly Gln His Glu Ala Ser Asp 20 25 30
- His Arg His Arg Cys Trp Pro Pro Pro Leu Pro Pro Pro Pro Gly Ala 35 40
- Ala Phe Pro Pro Xaa Leu His Gly Trp Ile Arg Val Leu Arg Xaa Leu 50 60
- Gln Gly Arg Val Arg Val Gly Glu Val Arg Gly Gly Asp Gly Cys
 70 75 80

```
Arq Gly Cys Gln His
                85
```

- (2) INFORMATION FOR SEQ ID NO:3689:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 165 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..165
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577809
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3689:

Met Lys Leu Gln Thr Thr Val Thr Val Ala Gly Leu Leu Phe Leu 5 10

Leu Leu Leu Ala Leu Pro Ser Leu Xaa Val Ser Met Ala Gly Ser Gly 20 25

Phe Cys Xaa Gly Cys Lys Asp Glu Phe Val Ala Trp Glu Lys Cys Val 40

Glu Glu Thr Asp Ala Ala Asp Ala Ser Ile Asp Val Val Glu Arg Cys 5.5

Gln Asp Val Thr Ala Ala Leu Arg Lys Val Ala Trp Thr Arg His Ala 70 75

Xaa Tyr Tyr Glu Pro Ile Leu Arg Ala Glu Arg Ala Met Ala Ala Asp 90 85

Leu Xaa Ala Phe Arg Pro Lys Lys Pro Pro Pro Thr Pro Arg Arg Arg 105 100

Arg Lys Ala Arg Arg Arg Gln Arg Arg Pro Arg Gln Arg Val 120

Arg Gln Thr Lys Ala Arg Ile Ser Arg Trp Leu Arg Arg Gln Leu Arg 140 135

Arg Arg Ala Glu Ile Leu Gln Pro Asp Trp Ala Lys Lys Gly Ser Gly 155 150

Val Phe Asn Phe Leu

165

- (2) INFORMATION FOR SEQ ID NO:3690:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 138 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..138
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577810
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3690:

Met Ala Gly Ser Gly Phe Cys Xaa Gly Cys Lys Asp Glu Phe Val Ala 10 5

Trp Glu Lys Cys Val Glu Glu Thr Asp Ala Ala Asp Ala Ser Ile Asp 20 25

Val Val Glu Arg Cys Gln Asp Val Thr Ala Ala Leu Arg Lys Val Ala 40

Trp Thr Arg His Ala Xaa Tyr Tyr Glu Pro Ile Leu Arg Ala Glu Arg 55

Ala Met Ala Ala Asp Leu Xaa Ala Phe Arg Pro Lys Lys Pro Pro Pro 75 70

Thr Pro Arg Arg Arg Lys Ala Arg Arg Arg Gln Arg Arg Pro 90 Arg Gln Arg Arg Val Arg Gln Thr Lys Ala Arg Ile Ser Arg Trp Leu

Page 2216 Client Docket No. 80145.003 105 110 100 Arg Arg Gln Leu Arg Arg Arg Ala Glu Ile Leu Gln Pro Asp Trp Ala 125 120 115 Lys Lys Gly Ser Gly Val Phe Asn Phe Leu 130 135 (2) INFORMATION FOR SEQ ID NO:3691: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 440 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..440 (D) OTHER INFORMATION: / Ceres Seq. ID 1577813 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3691: aactcgagcc aaaccccctc aactcaactg ctgaacgcag agttcgatct agcacgcgca 60 gCGgcggNcc gctgcccaca atggcgtccc ttttcaagga cccgagcaag ctctcagcgt 120 acagggaccg ccgattcaag ggcacacagg aggagtatga ggcaacgctg catgcgtcga 180 caacgctgta cattgggaat atgtccttct acaccacgga ggagcaggcc ttgcttgacg 240 300 cgaaatgctt caagtgagtg tgcttgcctg gagacagaac tgtttagccc ttgaatttgc ctatggaaga gtttgccctt ttactagtgt cgatgttgat ctggtatacc ttgctatgaa 360 ctggttaaag tttgtgctgg tttgggattt ttttgtgcat cttgtgatac ctcaagtctt catcatttaa atgtttagcc (2) INFORMATION FOR SEQ ID NO:3692: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 97 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..97 (D) OTHER INFORMATION: / Ceres Seq. ID 1577814 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3692: Asn Ser Ser Gln Thr Pro Ser Thr Gln Leu Leu Asn Ala Glu Phe Asp 10 5 Leu Ala Arg Ala Ala Ala Xaa Arg Cys Pro Gln Trp Arg Pro Phe Ser 25 2.0 Arg Thr Arg Ala Ser Ser Gln Arg Thr Gly Thr Ala Asp Ser Arg Ala

40 His Arg Arg Ser Met Arg Gln Arg Cys Met Arg Arg Gln Arg Cys Thr 55 Leu Gly Ile Cys Pro Ser Thr Pro Arg Arg Ser Arg Pro Cys Leu Thr 75 70 Arg Asn Ala Ser Ser Glu Cys Ala Cys Leu Glu Thr Glu Leu Phe Ser Pro

- (2) INFORMATION FOR SEQ ID NO:3693:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 84 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..84

(D) OTHER INFORMATION: / Ceres Seq. ID 1577815 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3693: Leu Glu Pro Asn Pro Leu Asn Ser Thr Ala Glu Arg Arg Val Arg Ser 10 Ser Thr Arg Ser Gly Xaa Pro Leu Pro Thr Met Ala Ser Leu Phe Lys 25 20 Asp Pro Ser Lys Leu Ser Ala Tyr Arg Asp Arg Arg Phe Lys Gly Thr 40 Gln Glu Glu Tyr Glu Ala Thr Leu His Ala Ser Thr Thr Leu Tyr Ile 60 55 Gly Asn Met Ser Phe Tyr Thr Thr Glu Glu Gln Ala Leu Leu Asp Ala 75 70 Lys Cys Phe Lys

- (2) INFORMATION FOR SEQ ID NO:3694:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..61
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577816
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3694:

Met Leu Gln Val Ser Val Leu Ala Trp Arg Gln Asn Cys Leu Ala Leu 1 5 10 15 15

Glu Phe Ala Tyr Gly Arg Val Cys Pro Phe Thr Ser Val Asp Val Asp 20 25 30

Leu Val Tyr Leu Ala Met Asn Trp Leu Lys Phe Val Leu Val Trp Asp 35 40 45

Phe Phe Val His Leu Val Ile Pro Gln Val Phe Ile Ile 50 55 60

- (2) INFORMATION FOR SEQ ID NO:3695:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 843 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:

ggc

- (A) NAME/KEY: -
- (B) LOCATION: 1..843
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577817
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3695:

agacactgac	accottcoaa	gcaaaaagag	cgaacacgag	cacgaacaca	agcgcagagc	60
adccaadcac	cacacacaca	ccgacgcgaa	ccaaccaacc	agctggtagt	aggttcgccg	120
agetaagege	datacttcac	cgcgcccttc	tettegeege	ggtgctcctc	gcggcctccg	180
agaagaagat	ctccccattc	cacctgggag	gggacgagag	caatctcata	aggggtgtgc	240
tageCCaget	ccccgggccc	gccgaggccg	addacdccdc	tcaCttcacc	gtcgcccact	300
Logocococc	ccgcgagcga	gctttggagt	ttactagggt	actcaaatcc	aagcggcagg	360
acaacaagaa	ccagggegee	gacctgatac	tageaggge	tgatgctgga	aaaaagagtg	420
tggtgaccgg	gaccctgcat	gacctgacac	aggaggeage	caagtctgtc	attaaatttc	480
tgtacagagc	aaaggtttgg	gtgaagccgt	gggaagaccc	tacttctat	attaactcta	540
gccttgttgg	agactctgaa	tctgaacccg	ageettetgt	- and and and	getageetee	600
ggcaagcaat	tgccaaactc	tctcttgaag	cagatattgt	acaagaagag	getegeetge	660
acaccattga	gaatgatggg	ctttccggcg	atttcacatc	atcatcttag	gattecayge	720
aaggatggaa	agcgtaaagg	tttaaaatga	agatttaggt	atttagagta	tgtcaagetg	780
aaatgctttg	ccttgtttat	tggaatatgt	atgtttcgtt	tcaaacgtgg	gagcatagaa	
ctgtatattt	cggtatttca	cactgttcat	ttccatgtct	gtatataagg	aggttcttct	840
-						

- Attorney Docket No. 2750-1235P Client Docket No. 80145.003 (2) INFORMATION FOR SEQ ID NO:3696: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 215 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..215 (D) OTHER INFORMATION: / Ceres Seq. ID 1577818 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3696: Thr Leu Thr Pro Phe Glu Ala Lys Arg Ala Asn Thr Ser Thr Asn Thr 10 5 Ser Ala Glu Gln Pro Ser Ala Thr His Thr Pro Thr Arg Thr Asn Gln 30 25 20 Pro Ala Gly Ser Arg Phe Ala Ala Leu Thr Met Met Pro Arg Arg Ala 4.5 40 Leu Leu Phe Ala Ala Val Leu Leu Ala Ala Ser Ala Ala Ala Val Ser 60 55 Gly Phe His Leu Gly Gly Asp Glu Ser Gly Leu Val Arg Gly Val Leu 70 75 Ala Ala Leu Arg Glu Arg Ala Glu Ala Glu Asp Ala Ala Arg Phe Ala 90 85 Val Ala His Tyr Asn Lys Asn Gln Gly Ala Ala Leu Glu Phe Thr Arg 105 100 Val Leu Lys Ser Lys Arg Gln Val Val Thr Gly Thr Leu His Asp Leu 120 Ile Leu Glu Ala Ala Asp Ala Gly Lys Lys Ser Val Tyr Arg Ala Lys 140 135 Val Trp Val Lys Pro Trp Glu Asp Phe Lys Ser Val Val Glu Phe Arg 155 150 Leu Val Gly Asp Ser Glu Ser Glu Pro Glu Pro Ser Val Ala Ser Asp 170 165 Val Ser Ser Gly Gln Ala Ile Ala Lys Leu Ser Leu Glu Ala Asp Ile 180 185 190 Val Gln Glu Glu Ala Arg Leu His Thr Ile Glu Asn Asp Gly Leu Ser 200 Gly Asp Phe Thr Ser Ser Ser 215 (2) INFORMATION FOR SEQ ID NO: 3697: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 173 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..173 (D) OTHER INFORMATION: / Ceres Seq. ID 1577819
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3697:

Met Met Pro Arg Arg Ala Leu Leu Phe Ala Ala Val Leu Leu Ala Ala 10 5

Ser Ala Ala Ala Val Ser Gly Phe His Leu Gly Gly Asp Glu Ser Gly 25 20

Leu Val Arg Gly Val Leu Ala Ala Leu Arg Glu Arg Ala Glu Ala Glu 45 40

Asp Ala Ala Arg Phe Ala Val Ala His Tyr Asn Lys Asn Gln Gly Ala 55 Ala Leu Glu Phe Thr Arg Val Leu Lys Ser Lys Arg Gln Val Val Thr

120

```
75
                  70
65
Gly Thr Leu His Asp Leu Ile Leu Glu Ala Ala Asp Ala Gly Lys Lys
                  90
              85
Ser Val Tyr Arg Ala Lys Val Trp Val Lys Pro Trp Glu Asp Phe Lys
                            105
          100
Ser Val Val Glu Phe Arg Leu Val Gly Asp Ser Glu Ser Glu Pro Glu
                        120
Pro Ser Val Ala Ser Asp Val Ser Ser Gly Gln Ala Ile Ala Lys Leu
                    135
Ser Leu Glu Ala Asp Ile Val Gln Glu Glu Ala Arg Leu His Thr Ile
                                  155
               150
Glu Asn Asp Gly Leu Ser Gly Asp Phe Thr Ser Ser Ser
             165 170
```

- (2) INFORMATION FOR SEQ ID NO:3698:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 172 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..172
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577820
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3698:

Met Pro Arg Arg Ala Leu Leu Phe Ala Ala Val Leu Leu Ala Ala Ser

Ala Ala Val Ser Gly Phe His Leu Gly Gly Asp Glu Ser Gly Leu 20 25 30

Val Arg Gly Val Leu Ala Ala Leu Arg Glu Arg Ala Glu Ala Glu Asp

Ala Ala Arg Phe Ala Val Ala His Tyr Asn Lys Asn Gln Gly Ala Ala

Leu Glu Phe Thr Arg Val Leu Lys Ser Lys Arg Gln Val Val Thr Gly 65 70 75 80

Thr Leu His Asp Leu Ile Leu Glu Ala Ala Asp Ala Gly Lys Lys Ser 85 90 95

Val Tyr Arg Ala Lys Val Trp Val Lys Pro Trp Glu Asp Phe Lys Ser

Val Val Glu Phe Arg Leu Val Gly Asp Ser Glu Ser Glu Pro Glu Pro 115 120 125

Ser Val Ala Ser Asp Val Ser Ser Gly Gln Ala Ile Ala Lys Leu Ser 130 135 140

Leu Glu Ala Asp Ile Val Gln Glu Glu Ala Arg Leu His Thr Ile Glu 145 150 155 160

Asn Asp Gly Leu Ser Gly Asp Phe Thr Ser Ser Ser 165

- (2) INFORMATION FOR SEQ ID NO:3699:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 422 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..422
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577845
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3699:

gctcttgaga aggactatga ggaagtcggt gcagagggtg ccgatgacga gggtgacgag 180 ggagacgact attgagtagc tggctaataa gtagttctct ggtggttaat ggttgggtta 240 ttttgagtat atactctatg gttccactcc attggatact gctgctgtgt gtgtttccat 300 tttgtactat gtagtaaatt gttcgtagcc ccctattggc catgattgtt catatcatcc 360 ttctttggtt tgcaacgcta ttcgtccaat ttcggtgtat atgctataat gctattatgt 420

- (2) INFORMATION FOR SEQ ID NO:3700:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 64 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..64
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577846
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3700:

Lys Glu Arg Glu Arg Gly Arg Gly Arg Asp Trp Arg Glu Ala Pro Ala 1 10 15

Gln Gly Lys Arg Asn Arg Gly Ala Arg Arg Glu Gly Glu Gly Glu Phe
20 25 30

Ser Glu Ala Arg Glu Asp Leu Ala Ala Leu Glu Lys Asp Tyr Glu Glu 35 40 45

Val Gly Ala Glu Gly Ala Asp Asp Glu Gly Asp Glu Gly Asp Asp Tyr 50 55 60

- (2) INFORMATION FOR SEQ ID NO:3701:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 65 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..65
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577847
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3701:

Arg Arg Glu Arg Glu Ala Glu Gly Glu Ile Gly Gly Arg Pro Leu Pro 1 5 10 15

Lys Ala Arg Glu Thr Ala Ala Arg Gly Glu Arg Val Arg Val Ser Ser 20 25 30

Gln Lys Pro Val Arg Thr Trp Leu Leu Leu Arg Arg Thr Met Arg Lys 35 40 45

Ser Val Gln Arg Val Pro Met Thr Arg Val Thr Arg Glu Thr Thr Ile 50 55 60

Glu

- (2) INFORMATION FOR SEQ ID NO:3702:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 822 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..822
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577866

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3702: attecaegge etgtegaece acaaaceaeg caacegatat attececage acceceagte cagecgteca accgagacae egegtgegaa ecaagcagae caeagcaaga agegtagteg 120 tcgccggaag gaaaggcgcg gasaagatgt cgtggcaggc gtacgtcgat gagcacctra 180 tgtgcgarat cgaaggacaa catctcagcg ccgccgscat cgtcggtcac gaggncagcg 240 cttgggcgca gtccgagagc ttccccgart taaagcctga ggaggttgct ggtatcataa 300 360 aggactttga tgaacctggt actcttgcac caactggtct tttcgttgga ggtacaaagt acatggtgat ccaaggtgaa cctggagttg tcatccgagg aaagaagggc actgggggca 420 480 ttactatcaa gaaaaccggc atgtccttga ttattggtGt ctacgacgag ccaatgactc cagggcaatg caacatggtg gtggagaggc tcggcgatta cctgatcgag cagggcttct 540 600 aaaagttegt catgyyetgt tttggteatt tgggeaceaa agtttgegee yeatttggtt 660 ctgtaatccg tgagctcgtg catgtacttg gcgtattgca tgcagtgaat aatttagctt gggtttgttt gttgggggca gtgttgggga cggatttgga ttggggttta tgcttggcat 720 cgcgtcgtat cgaaactcag ctgctgtttc gctgagtaat gtacatttcc ctggtaatgg 780 tacttgtgga ctctgatgct tttaygggaa cgagtgcatt tt

- (2) INFORMATION FOR SEQ ID NO:3703:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 179 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..179
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577867
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3703: Ser Thr Ala Cys Arg Pro Thr Asn His Ala Thr Asp Ile Phe Pro Ser 10 5 Thr Pro Ser Pro Ala Val Gln Pro Arg His Arg Val Arg Thr Lys Gln 25 20 Thr Thr Ala Arg Ser Val Val Val Ala Gly Arg Lys Gly Ala Xaa Lys 40 Met Ser Trp Gln Ala Tyr Val Asp Glu His Xaa Met Cys Xaa Ile Glu 55 60 Gly Gln His Leu Ser Ala Ala Xaa Ile Val Gly His Glu Xaa Ser Ala 75 70 Trp Ala Gln Ser Glu Ser Phe Pro Xaa Leu Lys Pro Glu Glu Val Ala 90 85 Gly Ile Ile Lys Asp Phe Asp Glu Pro Gly Thr Leu Ala Pro Thr Gly 110 105 100 Leu Phe Val Gly Gly Thr Lys Tyr Met Val Ile Gln Gly Glu Pro Gly 125 120

Val Val Ile Arg Gly Lys Lys Gly Thr Gly Gly Ile Thr Ile Lys Lys 140 135

Thr Gly Met Ser Leu Ile Ile Gly Val Tyr Asp Glu Pro Met Thr Pro 155 150 Gly Gln Cys Asn Met Val Val Glu Arg Leu Gly Asp Tyr Leu Ile Glu 175 170 165

Gln Gly Phe

- (2) INFORMATION FOR SEQ ID NO:3704:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 131 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..131

(D) OTHER INFORMATION: / Ceres Seq. ID 1577868 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3704: Met Ser Trp Gln Ala Tyr Val Asp Glu His Xaa Met Cys Xaa Ile Glu 10 Gly Gln His Leu Ser Ala Ala Xaa Ile Val Gly His Glu Xaa Ser Ala 25 20 Trp Ala Gln Ser Glu Ser Phe Pro Xaa Leu Lys Pro Glu Glu Val Ala 40 Gly Ile Ile Lys Asp Phe Asp Glu Pro Gly Thr Leu Ala Pro Thr Gly 55 Leu Phe Val Gly Gly Thr Lys Tyr Met Val Ile Gln Gly Glu Pro Gly 75 70 Val Val Ile Arg Gly Lys Lys Gly Thr Gly Gly Ile Thr Ile Lys Lys 90 85 Thr Gly Met Ser Leu Ile Ile Gly Val Tyr Asp Glu Pro Met Thr Pro 110 100 105 Gly Gln Cys Asn Met Val Val Glu Arg Leu Gly Asp Tyr Leu Ile Glu 125 120 115 Gln Gly Phe 130 (2) INFORMATION FOR SEQ ID NO:3705: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 120 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..120 (D) OTHER INFORMATION: / Ceres Seq. ID 1577869 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3705: Met Cys Xaa Ile Glu Gly Gln His Leu Ser Ala Ala Xaa Ile Val Gly 10 5 His Glu Xaa Ser Ala Trp Ala Gln Ser Glu Ser Phe Pro Xaa Leu Lys 25 Pro Glu Glu Val Ala Gly Ile Ile Lys Asp Phe Asp Glu Pro Gly Thr 4 0 Leu Ala Pro Thr Gly Leu Phe Val Gly Gly Thr Lys Tyr Met Val Ile 55 Gln Gly Glu Pro Gly Val Val Ile Arg Gly Lys Lys Gly Thr Gly Gly 75 70 Ile Thr Ile Lys Lys Thr Gly Met Ser Leu Ile Ile Gly Val Tyr Asp 90 Glu Pro Met Thr Pro Gly Gln Cys Asn Met Val Val Glu Arg Leu Gly 105 Asp Tyr Leu Ile Glu Gln Gly Phe (2) INFORMATION FOR SEQ ID NO:3706: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 371 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic)

- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..371
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577881
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3706: atataaaagg atcgccctcc gcgcgccgcc gctccttcgc aaaccctcct accccattcc

gccgccgcc gcccgcgcc cgccccgcga ccccgaggag gaggcaagat gaagacgatc 120 ctggcgtcgg agacGatgga catcccggag gGcgtcacgg tgacggtgg ggccaagctg 180 gtgacggtgg agggcccct ggcttcggcc gagttatctt atctatctat agtatcgtgt 240 taccgttcgc ttctgtcacc gtgttagtgt ccgttctacc tttggattag gtgttggtac 300 ccctgttgtt ccctttggtt gctcccgcta tgaaacgaga cgagagaaga atgagcaagg 360 tttttgttcg c

- (2) INFORMATION FOR SEQ ID NO:3707:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..95
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577882
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3707:

Ile Lys Gly Ser Pro Ser Ala Arg Arg Arg Ser Phe Ala Asn Pro Pro 1 10 15

Thr Pro Phe Arg Arg Pro Pro Pro Ala Ala Arg Pro Ala Thr Pro Arg 20 25 30

Arg Arg Gln Asp Glu Asp Asp Pro Gly Val Gly Asp Asp Gly His Pro
35 40 45

Gly Gly Arg His Gly Asp Gly Gly Gly Gln Ala Gly Asp Gly Gly 50 55 60

Pro Pro Gly Phe Gly Arg Val Ile Leu Ser Ile Tyr Ser Ile Val Leu 65 70 75 80

Pro Phe Ala Ser Val Thr Val Leu Val Ser Val Leu Pro Leu Asp 85 90 95

- (2) INFORMATION FOR SEQ ID NO:3708:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 52 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..52
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577883
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3708:

Met Lys Thr Ile Leu Ala Ser Glu Thr Met Asp Ile Pro Glu Gly Val 1 5 10 15

Thr Val Thr Val Ala Ala Lys Leu Val Thr Val Glu Gly Pro Leu Ala 20 25 30

Ser Ala Glu Leu Ser Tyr Leu Ser Ile Val Ser Cys Tyr Arg Ser Leu 35 40 45

Leu Ser Pro Cys

- (2) INFORMATION FOR SEQ ID NO:3709:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 800 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..800
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577905

```
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3709:
                                                                       60
ttttgatgaa aacgtcgact cttttttgtc gaatgatgat gtagacggaa gaggcatgtt
tgcagcactt gaaaaagggt cttcagagca caatacagag tccttaaagg gtctctcttt
                                                                      120
gagtgaagtt ggtaacaacc gtacaagtaa caacaaagtt gtttgctgtc acttctcttc
                                                                      180
agatgggaag ttactcgcta gtgccggcca tgagaagaag gtcttcctct ggaatatgga
                                                                       240
caattttaag atggatacca aaatagaaga ccatacaaac tttatcacag acataagatt
                                                                      300
cagaactaat tcaactcagt tggctacatc atcttctgac ggaactgttc gactttggaa
                                                                      360
tgctgctgat gaaagtggcg ctttacaaac ttttcatggg cataggtctc atgtaacatc
                                                                      420
agtagatttt cacccaagat tgacagaggt tctttgctct tgcgacgaca atggagAaaa
                                                                      480
ttctcttctg gacagttggt cagactacat ctactcatgt tttgcgggtg aagcagggtg
                                                                      540
                                                                       600
gaactggaag agtcaggttt gaacctcgaa gtgggcagct cctcgctgtg gcagctggaa
                                                                       660
gcatggtgaa catttttgat gttgaaaagc aatccagctt accctgcttc gtgattcaga
tgctgctttc tttcaagtga tatgtcgatg tagtgtgcga gcaatgtatt tggtttggct
                                                                      720
                                                                      780
acagetgtte tgtcgtctgt gcgtaaaaca ttagetatgt atctatecat atctgcatat
ttgaatgtat ggtcgttttc
```

- (2) INFORMATION FOR SEQ ID NO:3710:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 186 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..186
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577906
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3710:
- Phe Asp Glu Asn Val Asp Ser Phe Leu Ser Asn Asp Asp Val Asp Gly

 10 15

 10 15
- Arg Gly Met Phe Ala Ala Leu Glu Lys Gly Ser Ser Glu His Asn Thr 20 25 30
- Glu Ser Leu Lys Gly Leu Ser Leu Ser Glu Val Gly Asn Asn Arg Thr 35 40 45
- Ser Asn Asn Lys Val Val Cys Cys His Phe Ser Ser Asp Gly Lys Leu 50 55 60
- Leu Ala Ser Ala Gly His Glu Lys Lys Val Phe Leu Trp Asn Met Asp 65 70 75 80
- Asn Phe Lys Met Asp Thr Lys Ile Glu Asp His Thr Asn Phe Ile Thr 85 90 95
- Asp Ile Arg Phe Arg Thr Asn Ser Thr Gln Leu Ala Thr Ser Ser Ser 100 105 110
- Asp Gly Thr Val Arg Leu Trp Asn Ala Ala Asp Glu Ser Gly Ala Leu 115 120 125
- Gln Thr Phe His Gly His Arg Ser His Val Thr Ser Val Asp Phe His 130 135 140
- Pro Arg Leu Thr Glu Val Leu Cys Ser Cys Asp Asp Asn Gly Glu Asn 145 150 155 160
- Ser Leu Leu Asp Ser Trp Ser Asp Tyr Ile Tyr Ser Cys Phe Ala Gly
 165 170 175
- Glu Ala Gly Trp Asn Trp Lys Ser Gln Val 180 185
- (2) INFORMATION FOR SEQ ID NO:3711:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 168 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..168

(ix) FEATURE:

(A) NAME/KEY: -(B) LOCATION: 1..774

(D) OTHER INFORMATION: / Ceres Seq. ID 1577907 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3711: Met Phe Ala Ala Leu Glu Lys Gly Ser Ser Glu His Asn Thr Glu Ser 10 Leu Lys Gly Leu Ser Leu Ser Glu Val Gly Asn Asn Arg Thr Ser Asn 25 20 Asn Lys Val Val Cys Cys His Phe Ser Ser Asp Gly Lys Leu Leu Ala 4.0 Ser Ala Gly His Glu Lys Lys Val Phe Leu Trp Asn Met Asp Asn Phe 60 55 Lys Met Asp Thr Lys Ile Glu Asp His Thr Asn Phe Ile Thr Asp Ile 75 70 Arg Phe Arg Thr Asn Ser Thr Gln Leu Ala Thr Ser Ser Ser Asp Gly 90 85 Thr Val Arg Leu Trp Asn Ala Ala Asp Glu Ser Gly Ala Leu Gln Thr 105 100 Phe His Gly His Arg Ser His Val Thr Ser Val Asp Phe His Pro Arg 125 115 120 Leu Thr Glu Val Leu Cys Ser Cys Asp Asp Asn Gly Glu Asn Ser Leu 140 135 Leu Asp Ser Trp Ser Asp Tyr Ile Tyr Ser Cys Phe Ala Gly Glu Ala 150 155 Gly Trp Asn Trp Lys Ser Gln Val 165 (2) INFORMATION FOR SEQ ID NO:3712: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 108 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..108 (D) OTHER INFORMATION: / Ceres Seq. ID 1577908 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3712: Met Asp Asn Phe Lys Met Asp Thr Lys Ile Glu Asp His Thr Asn Phe 10 5 Ile Thr Asp Ile Arg Phe Arg Thr Asn Ser Thr Gln Leu Ala Thr Ser 25 20 Ser Ser Asp Gly Thr Val Arg Leu Trp Asn Ala Ala Asp Glu Ser Gly 45 40 Ala Leu Gln Thr Phe His Gly His Arg Ser His Val Thr Ser Val Asp 55 Phe His Pro Arg Leu Thr Glu Val Leu Cys Ser Cys Asp Asp Asn Gly 70 75 Glu Asn Ser Leu Leu Asp Ser Trp Ser Asp Tyr Ile Tyr Ser Cys Phe 90 85 Ala Gly Glu Ala Gly Trp Asn Trp Lys Ser Gln Val 100 105 (2) INFORMATION FOR SEQ ID NO:3713: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 774 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic)

(D) OTHER INFORMATION: / Ceres Seq. ID 1577940

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3713: atatattcaa gcgcgcgcat cagcgctgcc cccaaatagt acatctccct ccatgatgct 60 cgcaactect ectageatea etcaeegeea eetteaeage ggeateatee egeeaeeggg 120 tccgggccac cgcaggagac tcgtctccac tgcacgcgcc gccgtgaagc gagatggtgc 180 caccacggag gtagcaggcg atgagggcgc gtcgtcgtcg tcgtcgtcgc cgccgCccgc 240 cggaaagctc gagggtgact aaggctgccg cgacggcgac cccggcggcg ttttcgttgc 300 ccaaggacta cagccatacg ctgttccact ccgagttcct ggaggtgctg ggcctgatcq 360 acctcgagtc gctgcggaag cggccgaggc tcaccgtagg ggtgacggtg aaggcgtccc 420 tgccgctccc ggtgctcgtg gtcctggcgg ccctgtacct cgcggacgtg accagcGggt 480 540 cttgttgact ggacgcatca tcacctggag ggcgacgccg acgacgtagg ggactagtga agaagggacg ccctcactgc cbtgccctgc catgccccgg ctctccattg tagcggatgc 600 aggcatgcag cagcctcaac ttgcttgtgt aaacaatcag cttcaggaca taaactgact 660 tttagtttag tggtgtgctt tgtaaaccct gcttttatct tactcgctct atttctaact 720 attagatata atgtattcaa acacatcttt gaataagaaa cgattttagt ctct

- (2) INFORMATION FOR SEQ ID NO:3714:
 - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 86 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..86
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577941
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3714: Tyr Ile Gln Ala Arg Ala Ser Ala Leu Pro Pro Asn Ser Thr Ser Pro 10 5 Ser Met Met Leu Ala Thr Pro Pro Ser Ile Thr His Arg His Leu His 30 25 20 Ser Gly Ile Ile Pro Pro Pro Gly Pro Gly His Arg Arg Arg Leu Val 40 Ser Thr Ala Arg Ala Ala Val Lys Arg Asp Gly Ala Thr Thr Glu Val 60 55 Ala Gly Asp Glu Gly Ala Ser Ser Ser Ser Ser Pro Pro Pro Ala 75 70
- Gly Lys Leu Glu Gly Asp 85
- (2) INFORMATION FOR SEQ ID NO:3715:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 69 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..69
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577942
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3715: Met Met Leu Ala Thr Pro Pro Ser Ile Thr His Arg His Leu His Ser

10 15
Gly Ile Ile Pro Pro Pro Gly Pro Gly His Arg Arg Arg Leu Val Ser

20 25 30

Thr Ala Arg Ala Ala Val Lys Arg Asp Gly Ala Thr Thr Glu Val Ala
35 40 45

35 40 45
Gly Asp Glu Gly Ala Ser Ser Ser Ser Ser Pro Pro Pro Ala Gly
50 55 60

Lys Leu Glu Gly Asp

65

(2) INFORMATION FOR SEQ ID NO:3716:

- Page 2227 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 95 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..95 (D) OTHER INFORMATION: / Ceres Seq. ID 1577943 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3716: Met Arg Ala Arg Arg Arg Arg Arg Arg Arg Pro Pro Glu Ser 10 Ser Arg Val Thr Lys Ala Ala Ala Thr Ala Thr Pro Ala Ala Phe Ser 25 20 Leu Pro Lys Asp Tyr Ser His Thr Leu Phe His Ser Glu Phe Leu Glu 40 35 Val Leu Gly Leu Ile Asp Leu Glu Ser Leu Arg Lys Arg Pro Arg Leu 55 Thr Val Gly Val Thr Val Lys Ala Ser Leu Pro Leu Pro Val Leu Val 75 70 Val Leu Ala Ala Leu Tyr Leu Ala Asp Val Thr Ser Gly Ser Cys 85 90 (2) INFORMATION FOR SEQ ID NO:3717: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 674 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..674 (D) OTHER INFORMATION: / Ceres Seq. ID 1577969 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3717: ctcqctataa aacatgcccg cwcctgcact accactacta caaccagcgg tagtggccgg 120 agegeegete acceteaceg taccacagea gegategate getgaggtae acaaegageg 240 gcccgtgatg gtgggcgacg tccgggacgc gccggtgggc cgcgagaacg acctcgaggc 300 categagetC Gegegetteg Cggtegeega geacaacage aagaceaacg egatgetgga attcgagagg ctggtgaagg tgaggcacca ggtcgtggcc gggaccctgc accacttcac 360 cgtcgaggtg aaggaggccg gcggcggcga aaagaagctg tacgaggcca aggtGgtggg 420 agaaggcgtg ggagaacttc aagcagctgc agagcttcga gctcgtcgga gaNcgccgcg 480 540 qtcqcctgag gcgcacaggc ttttcgctgg aggctggagc acaacaatga aagaatttaa ctgtcatccc actggaaaag tatgatataa tgaataaacc agcgtcttac ccacatgtat 600 tgtaccctaa tgagatattt gaccactgta atagaatgag atgtgctaag gaatctgaaa 660 accttcttgc tttt (2) INFORMATION FOR SEQ ID NO:3718: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 183 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ix) FEATURE: (A) NAME/KEY: peptide

(ii) MOLECULE TYPE: peptide

- (B) LOCATION: 1..183
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577970
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3718: Met Pro Xaa Pro Ala Leu Pro Leu Leu Gln Pro Ala Val Ala Gly 10

35 40

Met Ala Glu Val His Asn Glu Arg Pro Val Met Val Gly Asp Val Arg 50 55 60

Asp Ala Pro Val Gly Arg Glu Asn Asp Leu Glu Ala Ile Glu Leu Ala 65 70 75 80

Arg Phe Ala Val Ala Glu His Asn Ser Lys Thr Asn Ala Met Leu Glu 85 90 95

Phe Glu Arg Leu Val Lys Val Arg His Gln Val Val Ala Gly Thr Leu 100 105 110

His His Phe Thr Val Glu Val Lys Glu Ala Gly Gly Glu Lys Lys 115 120 125

Leu Tyr Glu Ala Lys Val Val Gly Glu Gly Val Gly Glu Leu Gln Ala 130 135 140

Ala Ala Glu Leu Arg Ala Arg Arg Arg Xaa Pro Arg Ser Pro Glu Ala
145 150 155 160

His Arg Leu Phe Ala Gly Gly Trp Ser Thr Thr Met Lys Glu Phe Asn 165 170 175

Cys His Pro Thr Gly Lys Val 180

- (2) INFORMATION FOR SEQ ID NO:3719:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 135 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..135
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577971

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3719:

Met Ala Glu Val His Asn Glu Arg Pro Val Met Val Gly Asp Val Arg
1 5 10 15

Asp Ala Pro Val Gly Arg Glu Asn Asp Leu Glu Ala Ile Glu Leu Ala 20 25 30

Arg Phe Ala Val Ala Glu His Asn Ser Lys Thr Asn Ala Met Leu Glu 35 40 45

Phe Glu Arg Leu Val Lys Val Arg His Gln Val Val Ala Gly Thr Leu 50 60

His His Phe Thr Val Glu Val Lys Glu Ala Gly Gly Gly Glu Lys Lys 65 70 75 80

Leu Tyr Glu Ala Lys Val Val Gly Glu Gly Val Gly Glu Leu Gln Ala 85 90 95

Ala Ala Glu Leu Arg Ala Arg Arg Arg Xaa Pro Arg Ser Pro Glu Ala 100 105 110

His Arg Leu Phe Ala Gly Gly Trp Ser Thr Thr Met Lys Glu Phe Asn 115 120 125

Cys His Pro Thr Gly Lys Val 130 135

- (2) INFORMATION FOR SEQ ID NO: 3720:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..125
- (D) OTHER INFORMATION: / Ceres Seq. ID 1577972
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3720:
- Met Val Gly Asp Val Arg Asp Ala Pro Val Gly Arg Glu Asn Asp Leu 1 5 10 15
- Glu Ala Ile Glu Leu Ala Arg Phe Ala Val Ala Glu His Asn Ser Lys 20 25 30
- Thr Asn Ala Met Leu Glu Phe Glu Arg Leu Val Lys Val Arg His Gln 35 40 45
- Val Val Ala Gly Thr Leu His His Phe Thr Val Glu Val Lys Glu Ala 50 55 60
- Gly Gly Glu Lys Lys Leu Tyr Glu Ala Lys Val Val Gly Glu Gly 65 70 75 80
- Val Gly Glu Leu Gln Ala Ala Ala Glu Leu Arg Ala Arg Arg Xaa 85 90 95
- Pro Arg Ser Pro Glu Ala His Arg Leu Phe Ala Gly Gly Trp Ser Thr 100 105 110
- Thr Met Lys Glu Phe Asn Cys His Pro Thr Gly Lys Val 115 120 125
- (2) INFORMATION FOR SEQ ID NO:3721:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 800 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..800
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577981
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3721:
- aaaaaacctc ctgcagtcgt tttcacctcc tccctctctc acggcggctt ttctggcgac ggcggcggcg gcgacgacga gcagccacct ggggaagagc aggtagcagg aaatggcggc 120 gttcctgagg tcaaaatgtt caccagttgg acgtactttg atgggaagcc ttggaaatag 240 tttgtttggg gctgccaact cttctgttgg ggcaataaca aggccttctc attgcgatgc tatcagtcag cAaaatcaga acattcatcc agatgaggac taacctgaag gtggtcgata 300 actccggggc caagcgggtg atgtgcatcc agtccctgag ggggaagaaa ggagcaaggc 360 teggggacat gateategga teegtaaagg aggeecagee tegtggeaag gteaagaaag 420 gagacgtagt ctacggcgtg gtcgtccgtg ccgccatgaa gaaaggacgc agcgatggca 480 gcgaggtcca gttcgacgac aacgcggtgg tcctcgtgaa caagaagggc gagctgatcg 540 gcaccogcgt ctttggcccc gtcccccacg agctgaggaa gaagaagcac ctcaagatcc 600 tggccctggc tgaacacatt gtttgaggtg tgtcgcatag ccaagtgttt gtgggaatgt 660 ttttttttgt gtgttctctg tttgaataat gcattgtgaa acgatagcat ggaccgtttg 720 aactattttg atgacattgc tcgtccattt ggatggccaa tacgtgtcgt gatcgattct 780 ggagttccat tttttttgtt
- (2) INFORMATION FOR SEQ ID NO:3722:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 129 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..129
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577982
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3722:
- Met Leu Ser Val Ser Lys Ile Arg Thr Phe Ile Gln Met Arg Thr Asn 1 5 10 15
- Leu Lys Val Val Asp Asn Ser Gly Ala Lys Arg Val Met Cys Ile Gln
 20 25 30

```
      Ser
      Leu
      Arg
      Gly
      Lys
      Lys
      Gly
      Ala
      Arg
      Leu
      Gly
      Asp
      Met
      Ile
      Ile
      Gly
      Asp
      Met
      Ile
      Ile
      Gly
      Asp
      A
```

Val

- (2) INFORMATION FOR SEQ ID NO:3723:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 117 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..117
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577983
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3723: Met Arg Thr Asn Leu Lys Val Val Asp Asn Ser Gly Ala Lys Arg Val 10 5 Met Cys Ile Gln Ser Leu Arg Gly Lys Lys Gly Ala Arg Leu Gly Asp 25 Met Ile Ile Gly Ser Val Lys Glu Ala Gln Pro Arg Gly Lys Val Lys 40 Lys Gly Asp Val Val Tyr Gly Val Val Val Arg Ala Ala Met Lys Lys 55 Gly Arg Ser Asp Gly Ser Glu Val Gln Phe Asp Asp Asn Ala Val Val 75 70 Leu Val Asn Lys Lys Gly Glu Leu Ile Gly Thr Arg Val Phe Gly Pro 90 85 Val Pro His Glu Leu Arg Lys Lys Lys His Leu Lys Ile Leu Ala Leu 105 100

Ala Glu His Ile Val 115

- (2) INFORMATION FOR SEQ ID NO:3724:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 101 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..101
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1577984
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3724:
- Met Cys Ile Gln Ser Leu Arg Gly Lys Lys Gly Ala Arg Leu Gly Asp 1 5 10 15
- Met Ile Ile Gly Ser Val Lys Glu Ala Gln Pro Arg Gly Lys Val Lys
 20 25 30
- Lys Gly Asp Val Val Tyr Gly Val Val Val Arg Ala Met Lys Lys $35 \hspace{1cm} 45 \hspace{1cm} .$
- Gly Arg Ser Asp Gly Ser Glu Val Gln Phe Asp Asp Asn Ala Val Val

```
55
                                            60
    50
Leu Val Asn Lys Lys Gly Glu Leu Ile Gly Thr Arg Val Phe Gly Pro
                                        75
                    70
Val Pro His Glu Leu Arg Lys Lys Lys His Leu Lys Ile Leu Ala Leu
                85
Ala Glu His Ile Val
            100
(2) INFORMATION FOR SEQ ID NO:3725:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 747 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..747
          (D) OTHER INFORMATION: / Ceres Seq. ID 1577999
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3725:
accaaccacc gtggccccgg caaattactc aaatttgccc ttcctgtctc ggttccctct
                                                                        60
teceggegea ceagectace tegeogaege caggeegeca egeogeegga gacatgaace
                                                                       120
agcccgtgca gaagaacacc ctctacgtcg gtgggctggc ggaggaggtg gacgagaaga
                                                                       180
                                                                       240
tectgeacge egegttegtg ecetttggtg aggteaagga egteaagaeg eegetegate
agtecaegea gaageaeege tCettegget tegteaeett eetggagege gaggaegeeg
                                                                       300
                                                                       360
ccgctgccat ggacaacatg gacggcgccg agctcttcgg ccgcgtgctt accgtcaact
                                                                       420
acgccttccc cgagcgcatc aagggagggg agcagggatg ggctgcccag ccaatctggg
                                                                       480
ccgatgcgga cacttggttc gagaggcagc agcaggaaga ggagatgcag cggctgcagg
                                                                       540
cagagcaccg tgcagcgatg caggcagcag agaagctgca cagggagaaa ctggccgctg
aaagggaagg cgagaaagaa gaagatccca tggctgccgc agaggcccag gctgtgaaac
aaagttetta agaaceggat atcaacteat aacteatgtg ctaegttget geetgtttgt
                                                                        660
cagatatgac taaacgaatc ttgcgaatgc tgtttgtttt gctgaaagaa ccctatttct
                                                                        720
cacctgacgt gggattctta ttggttt
(2) INFORMATION FOR SEQ ID NO:3726:
      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 202 amino acids
           (B) TYPE: amino acid
           (C) STRANDEDNESS:
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: peptide
     (ix) FEATURE:
           (A) NAME/KEY: peptide
           (B) LOCATION: 1..202
           (D) OTHER INFORMATION: / Ceres Seq. ID 1578000
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3726:
 Gln Pro Pro Trp Pro Arg Gln Ile Thr Gln Ile Cys Pro Ser Cys Leu
                                     10
                 5
 Gly Ser Leu Phe Pro Ala His Gln Pro Thr Ser Pro Thr Pro Gly Arg
                                 25
                                                      30
             20
 His Ala Ala Gly Asp Met Asn Gln Pro Val Gln Lys Asn Thr Leu Tyr
                             40
 Val Gly Gly Leu Ala Glu Glu Val Asp Glu Lys Ile Leu His Ala Ala
                                              60
                         55
 Phe Val Pro Phe Gly Glu Val Lys Asp Val Lys Thr Pro Leu Asp Gln
                                          75
                     70
 Ser Thr Gln Lys His Arg Ser Phe Gly Phe Val Thr Phe Leu Glu Arg
                                      90
                 85
 Glu Asp Ala Ala Ala Met Asp Asn Met Asp Gly Ala Glu Leu Phe
                                                      110
                                  105
             100
 Gly Arg Val Leu Thr Val Asn Tyr Ala Phe Pro Glu Arg Ile Lys Gly
```

Gly Glu Gln Gly Trp Ala Ala Gln Pro Ile Trp Ala Asp Ala Asp Thr

115

140 135 130 Trp Phe Glu Arg Gln Gln Glu Glu Glu Met Gln Arg Leu Gln Ala 155 150 Glu His Arg Ala Ala Met Gln Ala Ala Glu Lys Leu His Arg Glu Lys 170 165 Leu Ala Ala Glu Arg Glu Gly Glu Lys Glu Glu Asp Pro Met Ala Ala 185 Ala Glu Ala Gln Ala Val Lys Gln Ser Ser 200 195 (2) INFORMATION FOR SEQ ID NO: 3727: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 165 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..165 (D) OTHER INFORMATION: / Ceres Seq. ID 1578001 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3727: Met Asn Gln Pro Val Gln Lys Asn Thr Leu Tyr Val Gly Gly Leu Ala 10 5 Glu Glu Val Asp Glu Lys Ile Leu His Ala Ala Phe Val Pro Phe Gly 25 20 Glu Val Lys Asp Val Lys Thr Pro Leu Asp Gln Ser Thr Gln Lys His 40 Arg Ser Phe Gly Phe Val Thr Phe Leu Glu Arg Glu Asp Ala Ala Ala 55 Ala Met Asp Asn Met Asp Gly Ala Glu Leu Phe Gly Arg Val Leu Thr 75 70 Val Asn Tyr Ala Phe Pro Glu Arg Ile Lys Gly Gly Glu Gln Gly Trp 90 85 Ala Ala Gln Pro Ile Trp Ala Asp Ala Asp Thr Trp Phe Glu Arg Gln 105 110 100 Gln Gln Glu Glu Met Gln Arg Leu Gln Ala Glu His Arg Ala Ala 120 125 Met Gln Ala Ala Glu Lys Leu His Arg Glu Lys Leu Ala Ala Glu Arg 140 135 Glu Gly Glu Lys Glu Glu Asp Pro Met Ala Ala Ala Glu Ala Gln Ala 155 150 Val Lys Gln Ser Ser 165 (2) INFORMATION FOR SEQ ID NO:3728: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 967 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..967 (D) OTHER INFORMATION: / Ceres Seq. ID 1578004 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3728: 60 aaaactaacc ccaaacccca atccacccca tcccctcctc atccactccg ggcggccatg geetgeteet teteegeege cateacegte tetteegeee etaeeeegge egeeagaeee 120 ctcgctgctg ccccgcagtc cgtctgcatc gctcgctccg cggtcgccac cactgccagg 180 240 ccgctccgcc tcgccgcctc aaggtccgcg cgggctacca gactcgttgc ccgcgccagg 300 tangtcgatg acttgccgct ggtcgggaac aaggcgccag acttagaagc cgaggctgtg ttcgaccagg agttcatcaa cgtgaagctc tctgattaca ttgggaagaa gtacgtcatt 360 ctgttcttct accccttgga tttcaccttc gtctgcmcga ccgagattAc tgcgtttagt gacagatacg aggaatttga gaagttgaac actgaggttc ttggtgtttc cattgacagt 480 gtgttctccc accttgcatg ggtgcagaca gacaggaagt cgggtgggct cggcgatctt 540 600 aaatacccac ttgtttctga tgtgaccaaa tcaatttcaa aggcctttgg tgttctgatc cctgaccagg gtattgcttt gagaggactg ttcatcattg acaaggaggg agtgattcag 660 cactctacca ttaacaacct tgccattggt cgtagtgtgg atgagaccat gaggaccctt 720 caggcattgc agtacgtcca ggagaaccca gacgaggtgt gcccggccgg atggaaacca 780 840 ggggagaggt cgatgaagcc cgaccccaag ggaagcaaag agtacttcgc ggccatctag attcgtcgtc attgagaagc aggtgcccgt taagtgctcc agcagtaggt tctcgtgttc 900 ageggagete gegttttgae aagtgtattg tgetgatgtg catecegatt tgagtgetgt 960 tctttqc

- (2) INFORMATION FOR SEQ ID NO:3729:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 279 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..279
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578005
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3729:
- Lys Thr Asn Pro Lys Pro Gln Ser Thr Pro Ser Pro Pro His Pro Leu 1 10 15
- Arg Ala Ala Met Ala Cys Ser Phe Ser Ala Ala Ile Thr Val Ser Ser 20 25 30
- Ala Pro Thr Pro Ala Ala Arg Pro Leu Ala Ala Ala Pro Gln Ser Val 35 40 45
- Cys Ile Ala Arg Ser Ala Val Ala Thr Thr Ala Arg Pro Leu Arg Leu 50 55 60 Ala Ala Ser Arg Ser Ala Arg Ala Thr Arg Leu Val Ala Arg Ala Arg
- 70 75 80
- Xaa Val Asp Asp Leu Pro Leu Val Gly Asn Lys Ala Pro Asp Leu Glu 85 90 95
- Ala Glu Ala Val Phe Asp Gln Glu Phe Ile Asn Val Lys Leu Ser Asp 100 105 110
- Tyr Ile Gly Lys Lys Tyr Val Ile Leu Phe Phe Tyr Pro Leu Asp Phe
 115 120 125
- Thr Phe Val Cys Xaa Thr Glu Ile Thr Ala Phe Ser Asp Arg Tyr Glu 130 135 140
- Glu Phe Glu Lys Leu Asn Thr Glu Val Leu Gly Val Ser Ile Asp Ser 145 150 155 160
- Val Phe Ser His Leu Ala Trp Val Gln Thr Asp Arg Lys Ser Gly Gly
 165 170 175
- Leu Gly Asp Leu Lys Tyr Pro Leu Val Ser Asp Val Thr Lys Ser Ile 180 185 190
- Ser Lys Ala Phe Gly Val Leu Ile Pro Asp Gln Gly Ile Ala Leu Arg 195 200 205
- Gly Leu Phe Ile Ile Asp Lys Glu Gly Val Ile Gln His Ser Thr Ile 210 215 220
- Asn Asn Leu Ala Ile Gly Arg Ser Val Asp Glu Thr Met Arg Thr Leu 225 230 235 240
- Gln Ala Leu Gln Tyr Val Gln Glu Asn Pro Asp Glu Val Cys Pro Ala 245 250 255 Gly Trp Lys Pro Gly Glu Arg Ser Met Lys Pro Asp Pro Lys Gly Ser

- 260 265 Lys Glu Tyr Phe Ala Ala Ile
- 275
 (2) INFORMATION FOR SEQ ID NO:3730:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..260
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578006
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3730:

Met Ala Cys Ser Phe Ser Ala Ala Ile Thr Val Ser Ser Ala Pro Thr 5 10

Pro Ala Ala Arg Pro Leu Ala Ala Pro Gln Ser Val Cys Ile Ala 30 25

Arg Ser Ala Val Ala Thr Thr Ala Arg Pro Leu Arg Leu Ala Ala Ser 40

Arg Ser Ala Arg Ala Thr Arg Leu Val Ala Arg Ala Arg Xaa Val Asp 55

Asp Leu Pro Leu Val Gly Asn Lys Ala Pro Asp Leu Glu Ala Glu Ala

75 70 Val Phe Asp Gln Glu Phe Ile Asn Val Lys Leu Ser Asp Tyr Ile Gly

90 85 Lys Lys Tyr Val Ile Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val

105 110 100 Cys Xaa Thr Glu Ile Thr Ala Phe Ser Asp Arg Tyr Glu Glu Phe Glu

120 125 Lys Leu Asn Thr Glu Val Leu Gly Val Ser Ile Asp Ser Val Phe Ser

140 135 His Leu Ala Trp Val Gln Thr Asp Arg Lys Ser Gly Gly Leu Gly Asp

155 150 Leu Lys Tyr Pro Leu Val Ser Asp Val Thr Lys Ser Ile Ser Lys Ala

170 165 Phe Gly Val Leu Ile Pro Asp Gln Gly Ile Ala Leu Arg Gly Leu Phe

185 Ile Ile Asp Lys Glu Gly Val Ile Gln His Ser Thr Ile Asn Asn Leu

205 200 Ala Ile Gly Arg Ser Val Asp Glu Thr Met Arg Thr Leu Gln Ala Leu

220 215 Gln Tyr Val Gln Glu Asn Pro Asp Glu Val Cys Pro Ala Gly Trp Lys 235 230

Pro Gly Glu Arg Ser Met Lys Pro Asp Pro Lys Gly Ser Lys Glu Tyr 250

Phe Ala Ala Ile

260

- (2) INFORMATION FOR SEQ ID NO:3731:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 828 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..828
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578007
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3731:

agaaacagac ctgcacggct ccactccaac tccctcccaa gccccaagcc ggcaagcccc 60 caaccacctt ccttttccac atccacaccg ccccgggttt cctcacgcct ccgccctccc 120 accegeteae tecegteeet atecacegeg atggeeteee geetegeegt egeegtegee 180 gtogoogogo cogogtogto toottocoog gtoggoacog togoocogom cogogtogoo 240 cteegeegag geeteeegee gaegtggeae geteteegeg eeeteeeteg ateeegtgge 300 geggeegteg tgtgeeagge ceagggegge caggaeaceg ceatecaagt teetgatgtg 360 agcaaatcca catggcaatc acttgtggtg gagagcgagc ttcccgtCcc tcgttcagtt 420 ctgggcctca tggtgtggac cgtgtaagat gatagacccc atcgttggca agctctcgaa 480 ggagtacgaa ggaaagctga agtgttacaa gctaaacacc gacgagaacc ctgacatcgc 540 gacccaattc ggcatccgga gcatccccac catgatgata ttcaagaatg gtgagaagaa 600 ggacgcggtg attggagccg tgccagagag caccctggtc acctgcatcg acaagtacgt 660 tggtgggagg tgaaatctca atctgggcca ctagccttgg acttccatat gtagacggat 720 gggtatgtgt ataccgttca tatcgaactg ctgttgagta gttgtatgta gataataatg 780 tgatgctcac tccaataaat gcgattcaag gatgggcaag tcatctgg

- (2) INFORMATION FOR SEQ ID NO:3732:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 148 amino acids
 - (B) TYPE: amino acid(C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..148
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578008
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3732:

Arg Asn Arg Pro Ala Arg Leu His Ser Asn Ser Leu Pro Ser Pro Lys
1 10 15

Pro Ala Ser Pro Gln Pro Pro Ser Phe Ser Thr Ser Thr Pro Pro Arg 20 25 30

Val Ser Ser Arg Leu Arg Pro Pro Thr Arg Ser Leu Pro Ser Leu Ser 35 40 45

Thr Ala Met Ala Ser Arg Leu Ala Val Ala Val Ala Val Ala Ala Pro 50 55 60

Ala Ser Ser Pro Ser Pro Val Gly Thr Val Ala Pro Xaa Arg Val Ala 65 70 75 80

Leu Arg Arg Gly Leu Pro Pro Thr Trp His Ala Leu Arg Ala Leu Pro 85 90 95

Arg Ser Arg Gly Ala Ala Val Val Cys Gln Ala Gln Gly Gln Asp 100 105 110

Thr Ala Ile Gln Val Pro Asp Val Ser Lys Ser Thr Trp Gln Ser Leu 115 120 125

Val Val Glu Ser Glu Leu Pro Val Pro Arg Ser Val Leu Gly Leu Met 130 135 140

Val Trp Thr Val

145

- (2) INFORMATION FOR SEQ ID NO:3733:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 119 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..119
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578009

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3733:

Glu Thr Asp Leu His Gly Ser Thr Pro Thr Pro Ser Gln Ala Pro Ser 1 5 10 15

Arg Gln Ala Pro Asn His Leu Pro Phe Pro His Pro His Arg Pro Gly 20 25 30

Phe Pro His Ala Ser Ala Leu Pro Pro Ala His Ser Arg Pro Tyr Pro 35 40 45

Pro Arg Trp Pro Pro Ala Ser Pro Ser Pro Ser Pro Ser Pro Arg Pro 50 55 60

```
Arg Arg Leu Leu Pro Arg Ser Ala Pro Ser Pro Arg Xaa Ala Ser Pro
                                        75
                    70
Ser Ala Glu Ala Ser Arg Arg Gly Thr Leu Ser Ala Pro Ser Leu
                                    90
                85
Asp Pro Val Ala Arg Pro Ser Cys Ala Arg Pro Arg Ala Ala Arg Thr
            100
                                105
```

Pro Pro Ser Lys Phe Leu Met 115

- (2) INFORMATION FOR SEQ ID NO:3734:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 117 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..117
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578010
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3734:

Lys Gln Thr Cys Thr Ala Pro Leu Gln Leu Pro Pro Lys Pro Gln Ala 10 5

Gly Lys Pro Pro Thr Thr Phe Leu Phe His Ile His Thr Ala Pro Gly 25 20

Phe Leu Thr Pro Pro Pro Ser His Pro Leu Thr Pro Val Pro Ile His 4.0

Arg Asp Gly Leu Pro Pro Arg Arg Arg Arg Arg Arg Arg Ala Arg 55

Val Val Ser Phe Pro Gly Arg His Arg Arg Pro Xaa Pro Arg Arg Pro 75 70

Pro Pro Arg Pro Pro Ala Asp Val Ala Arg Ser Pro Arg Pro Pro Ser 90 85

Ile Pro Trp Arg Gly Arg Arg Val Pro Gly Pro Gly Arg Pro Gly His 105 100

Arg His Pro Ser Ser

115

- (2) INFORMATION FOR SEQ ID NO:3735:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 628 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..628
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578015
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3735:

atatatttga tttggaagga aaataactta agactcgtaa aggtcgtgga ggacgaggtg 60 120 tttcccgacg ggacggtgct gaagaagggc accaaggtgg tctacgccat gtactccatg grgcggatgg agagcatctg gggcgacgac tgccgggagt acaggccgga gcggtggctc 180 cgggacggcc gcttcatgag cgagtccgcc tacaagttca Ccgccttcaa cggcggcccg 240 cgcctgtgcc tcggcaagga cttcgcctac taccagatga agttcgccgc cgcctccatc 300 ctNccgCcgy taccgcgtcg acgtcgtcga gggccacccc gtcgcgccca agatggcgct 360 caccatgtac atgaagcacg gcctcaaggt cacgctgacc aagagagaca agaccaagct 420 ctgaactgtt ggtgccgagc cgagcttgcc aataagactc tgagactgaa gagagatata 480 cagtatgaaa gaagcagggc tottcatttg tttcatttac atctagtata gaacttttat 540 atatatgtat agatacatat gtatatgtgt tggcaaaacg cttgaccttc aggtgatgta 600

- accqqtaata ttgtagcagt attatttc (2) INFORMATION FOR SEQ ID NO: 3736:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..176
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578016
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3736:
- Ile Tyr Leu Ile Trp Lys Glu Asn Asn Leu Arg Leu Val Lys Val Val 1 5 10 15
- Glu Asp Glu Val Phe Pro Asp Gly Thr Val Leu Lys Lys Gly Thr Lys 20 25 30
- Val Val Tyr Ala Met Tyr Ser Met Xaa Arg Met Glu Ser Ile Trp Gly 35 40 45
- Asp Asp Cys Arg Glu Tyr Arg Pro Glu Arg Trp Leu Arg Asp Gly Arg
- Phe Met Ser Glu Ser Ala Tyr Lys Phe Thr Ala Phe Asn Gly Gly Pro
 70 75 80
- 65 70 75 80

 Arg Leu Cys Leu Gly Lys Asp Phe Ala Tyr Tyr Gln Met Lys Phe Ala
- 85 90 95
 Ala Ala Ser Ile Xaa Pro Pro Xaa Pro Arg Arg Arg Arg Gly Pro
 100 105 110
- Pro Arg Arg Ala Gln Asp Gly Ala His His Val His Glu Ala Arg Pro 115 120 125
- Gln Gly His Ala Asp Gln Glu Arg Gln Asp Gln Ala Leu Asn Cys Trp 130 135 140
- Cys Arg Ala Glu Leu Ala Asn Lys Thr Leu Arg Leu Lys Arg Asp Ile 145 150 155 160
- Gln Tyr Glu Arg Ser Arg Ala Leu His Leu Phe His Leu His Leu Val 165 170 175
- (2) INFORMATION FOR SEQ ID NO:3737:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 140 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..140
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578017
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3737:
- Met Tyr Ser Met Xaa Arg Met Glu Ser Ile Trp Gly Asp Asp Cys Arg 1 5 10
- Glu Tyr Arg Pro Glu Arg Trp Leu Arg Asp Gly Arg Phe Met Ser Glu 20 25 30
- Ser Ala Tyr Lys Phe Thr Ala Phe Asn Gly Gly Pro Arg Leu Cys Leu 35 40 45
- Gly Lys Asp Phe Ala Tyr Tyr Gln Met Lys Phe Ala Ala Ala Ser Ile 50 60
- Xaa Pro Pro Xaa Pro Arg Arg Arg Arg Gly Pro Pro Arg Arg Ala
 65 70 75 80
- Gln Asp Gly Ala His His Val His Glu Ala Arg Pro Gln Gly His Ala 85 90 95
- Asp Gln Glu Arg Gln Asp Gln Ala Leu Asn Cys Trp Cys Arg Ala Glu 100 105 110
- Leu Ala Asn Lys Thr Leu Arg Leu Lys Arg Asp Ile Gln Tyr Glu Arg

120

180

240

300

360

420

480

540

600 660

720

780

840

900

```
125
                           120
       115
Ser Arg Ala Leu His Leu Phe His Leu His Leu Val
        135
(2) INFORMATION FOR SEQ ID NO:3738:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 137 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..137
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578018
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3738:
Met Xaa Arg Met Glu Ser Ile Trp Gly Asp Asp Cys Arg Glu Tyr Arg
                                   10
Pro Glu Arg Trp Leu Arg Asp Gly Arg Phe Met Ser Glu Ser Ala Tyr
                               25
            20
Lys Phe Thr Ala Phe Asn Gly Gly Pro Arg Leu Cys Leu Gly Lys Asp
                            40
Phe Ala Tyr Tyr Gln Met Lys Phe Ala Ala Ala Ser Ile Xaa Pro Pro
                        55
Xaa Pro Arg Arg Arg Arg Gly Pro Pro Arg Arg Ala Gln Asp Gly
                    70
Ala His His Val His Glu Ala Arg Pro Gln Gly His Ala Asp Gln Glu
                                    90
                8.5
Arg Gln Asp Gln Ala Leu Asn Cys Trp Cys Arg Ala Glu Leu Ala Asn
                              105
           100
Lys Thr Leu Arg Leu Lys Arg Asp Ile Gln Tyr Glu Arg Ser Arg Ala
                          120
Leu His Leu Phe His Leu His Leu Val
                       135
(2) INFORMATION FOR SEQ ID NO:3739:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 922 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..922
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578031
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3739:
ctttccctcc ccatcccgtg aggcgtgagc gccacaccca cacgaaggat cccgaagccg
aagagaaccc taccgaggag gcagaaaatc cgtagcgcgc ctcatacgat tccgagatcc
gtgcctctta tcggcagcca tgatgctgcg cgcngcgggc aggcgactcc tcggcgtagg
aggeggegat ceagegeeg eggtegetge tgetgtggeg gegageagga geagaggata
ccacgagcgg gtggtggacc actacaacaa cccgcgcaac gtggggtcct tggacaagga
cgacacggac gtcggaacgg ggatcgtcgg cgcgccggcg tgcggggacg tcatgaagct
gcagatccgc gtcgacgagg ggtccggcag gatcgtcgac gcgcgcttca agaCcttcgg
ctgcRgctcc gccatcgcgt cctcctccgt cgcttccgaa tgggtcaagg gcaagcaagt
ggaggaagtg gtggccatca agaacaccga gattgcgaag cacctgtctc ttccaccagt
 gaagctccac tgcagcatgc tcgctgagga cgcaatcaag gccgccgtga aggattacga
```

ggcaaagaaa gggaagaaga tggccaaggc agaggagcag gacaccccat gcccgtaaga gcgacagcta gtaaactgaa gcgagcagag agtactgtat gtagtatgta acggctaacg

caacgatgtt tgggtttcat agaataagcg aacttgccgc agtgtttttt ttatctgctc

tgcacatgaa taaggtctgc ccattgctct ttatctgttt agtcggagca tgtatgctta

qtttqatcaa gcaatgctgt tg

- (2) INFORMATION FOR SEQ ID NO:3740:

 (i) SEQUENCE CHARACTERISTICS:

 (A) LENGTH: 172 amino acids

 (B) TYPE: amino acid

 (C) STRANDEDNESS:

 (D) TOPOLOGY: linear

 (ii) MOLECULE TYPE: peptide

 (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..172
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578032
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3740: Met Met Leu Arg Xaa Ala Gly Arg Arg Leu Leu Gly Val Gly Gly 10 5 Asp Pro Ala Pro Ala Val Ala Ala Ala Val Ala Ala Ser Arg Ser Arg 25 20 Gly Tyr His Glu Arg Val Val Asp His Tyr Asn Asn Pro Arg Asn Val 4.0 Gly Ser Leu Asp Lys Asp Asp Thr Asp Val Gly Thr Gly Ile Val Gly 5.5 Ala Pro Ala Cys Gly Asp Val Met Lys Leu Gln Ile Arg Val Asp Glu 75 70 Gly Ser Gly Arg Ile Val Asp Ala Arg Phe Lys Thr Phe Gly Cys Xaa 90 85 Ser Ala Ile Ala Ser Ser Ser Val Ala Ser Glu Trp Val Lys Gly Lys 105 Gln Val Glu Glu Val Val Ala Ile Lys Asn Thr Glu Ile Ala Lys His 120 125 Leu Ser Leu Pro Pro Val Lys Leu His Cys Ser Met Leu Ala Glu Asp 135 140 Ala Ile Lys Ala Ala Val Lys Asp Tyr Glu Ala Lys Lys Gly Lys Lys 150 155 Met Ala Lys Ala Glu Glu Gln Asp Thr Pro Cys Pro
- 165
 (2) INFORMATION FOR SEQ ID NO:3741:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 171 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..171
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578033
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3741:
- Met Leu Arg Xaa Ala Gly Arg Arg Leu Leu Gly Val Gly Gly Asp

 5 10 15

 15 20 Arg Ser Arg Gly
- Pro Ala Pro Ala Val Ala Ala Ala Val Ala Ala Ser Arg Ser Arg Gly
 20 25 30
- Tyr His Glu Arg Val Val Asp His Tyr Asn Asn Pro Arg Asn Val Gly
 35
 40
 45
- Ser Leu Asp Lys Asp Asp Thr Asp Val Gly Thr Gly Ile Val Gly Ala 50 55 60

 Pro Ala Cys Gly Asp Val Met Lys Leu Gln Ile Arg Val Asp Glu Gly
- 65 70 75 80

 Ser Gly Arg Ile Val Asp Ala Arg Phe Lys Thr Phe Gly Cys Xaa Ser

 85 90 95
- Ala Ile Ala Ser Ser Ser Val Ala Ser Glu Trp Val Lys Gly Lys Gln
 100 105 110

 Val Glu Glu Val Val Ala Ile Lys Asn Thr Glu Ile Ala Lys His Leu

120

180 240

300 360

420

480

540

600

660

720

125 120 115 Ser Leu Pro Pro Val Lys Leu His Cys Ser Met Leu Ala Glu Asp Ala 140 135 Ile Lys Ala Ala Val Lys Asp Tyr Glu Ala Lys Lys Gly Lys Lys Met 155 150 Ala Lys Ala Glu Glu Gln Asp Thr Pro Cys Pro 170 165 (2) INFORMATION FOR SEQ ID NO:3742: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 101 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..101 (D) OTHER INFORMATION: / Ceres Seq. ID 1578034 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3742: Met Lys Leu Gln Ile Arg Val Asp Glu Gly Ser Gly Arg Ile Val Asp 10 5 Ala Arg Phe Lys Thr Phe Gly Cys Xaa Ser Ala Ile Ala Ser Ser Ser 25 30 20 Val Ala Ser Glu Trp Val Lys Gly Lys Gln Val Glu Glu Val Val Ala 40 Ile Lys Asn Thr Glu Ile Ala Lys His Leu Ser Leu Pro Pro Val Lys 50 55 Leu His Cys Ser Met Leu Ala Glu Asp Ala Ile Lys Ala Ala Val Lys 70 75 Asp Tyr Glu Ala Lys Lys Gly Lys Lys Met Ala Lys Ala Glu Glu Gln 90 85 Asp Thr Pro Cys Pro 100 (2) INFORMATION FOR SEQ ID NO:3743: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 753 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..753 (D) OTHER INFORMATION: / Ceres Seq. ID 1578035 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3743: aaatgacgcc atgccggcgc caccgagggc gaaagctgtc cagatcgtgt gattttgcat cccatccgcg agcgcgacac gsstgaccta ctcgacggcc tccacctccg tcttgaggcg aacgtangtg cgaaggacca actctttcga agggaaatta tatctcaggt gcttaggagt ctgccatggc cagcgagaat aaggtattta ggttcgagga agtcgccaag cacaacgtca ccaaggactg ctggatcatc atcgccggca aggtgtatga tgtcactcct tttatggatg agcatcctgg tggagatgag gttttgctag ctgtaactgg gaaagatgct acagctgatt ttgaagatat tggccacagt gattccgcaa gggacatgat ggagaagtac cacatcgggc agatagatgc ttcaacaatc ccagcaaagc gaacttatgt gcacccccag caagcgccca gccactcaga caagaataat gatctcctca tcaagatcct gcagttcctt gtgCccatta tgatcctggg ccttgcattt ggtatacgtc agtacagcaa atcagagtag tactgttctt gaagacttgc ctttggagtc tgttttatgg taatggtttg gatgagaaca gttcagtaat tgcttagtgt atttgtcagg tggatgttat ctcattggtc atatactatg tattatggac

atccatgtgt tgccgaaatg tgctcttttc ccc (2) INFORMATION FOR SEQ ID NO:3744:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 134 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..134
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578036
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3744:

Met Ala Ser Glu Asn Lys Val Phe Arg Phe Glu Glu Val Ala Lys His

Asn Val Thr Lys Asp Cys Trp Ile Ile Ile Ala Gly Lys Val Tyr Asp 20 25 30

Val Thr Pro Phe Met Asp Glu His Pro Gly Gly Asp Glu Val Leu Leu 35 40 45

Ala Val Thr Gly Lys Asp Ala Thr Ala Asp Phe Glu Asp Ile Gly His 50 55 60

Ser Asp Ser Ala Arg Asp Met Met Glu Lys Tyr His Ile Gly Gln Ile
65 70 75 80

Asp Ala Ser Thr Ile Pro Ala Lys Arg Thr Tyr Val His Pro Gln Gln 85 90 95

Ala Pro Ser His Ser Asp Lys Asn Asn Asp Leu Leu Ile Lys Ile Leu 100 105 110

Gln Phe Leu Val Pro Ile Met Ile Leu Gly Leu Ala Phe Gly Ile Arg 115 120 125

Gln Tyr Ser Lys Ser Glu

130

- (2) INFORMATION FOR SEQ ID NO:3745:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 98 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..98
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578037
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3745:

Met Asp Glu His Pro Gly Gly Asp Glu Val Leu Leu Ala Val Thr Gly
1 5 10 15

Lys Asp Ala Thr Ala Asp Phe Glu Asp Ile Gly His Ser Asp Ser Ala 20 25 30

Arg Asp Met Met Glu Lys Tyr His Ile Gly Gln Ile Asp Ala Ser Thr

Ile Pro Ala Lys Arg Thr Tyr Val His Pro Gln Gln Ala Pro Ser His 50 55 60

Ser Asp Lys Asn Asn Asp Leu Leu Ile Lys Ile Leu Gln Phe Leu Val 70 75 80

Pro Ile Met Ile Leu Gly Leu Ala Phe Gly Ile Arg Gln Tyr Ser Lys 85 90 95

Ser Glu

- (2) INFORMATION FOR SEQ ID NO: 3746:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 803 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..803
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578042
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3746: aatccccaca acaccagaat ccgcgaatca cagacgcgtc tatctcagct tgctgcactg 60 cactaccctg ccctgccatc atatcgtacg tgagcccggc cgagcgagag crngggagag 120 gcatggctgc tccgaagctc gcgacgctgg cgctggccgt gctcctggcg gcgaccgtgg 180 tggctccccc ggccgcggtg cgcgcggcga tgtcgtgctc caccgtgtac agcacgctga 240 300 tgccgtgcct gccgttcgtc cagatgggcg gggccatgcc gccccagccg tgctgcggcg gcatccgcag cctgctgcag cagccaacaa cacccccgac cgccgcacta tctgcggctg 360 cctcaagaac gtcgccaacg gCgccaacgg gagcggcacc tacatcagec segcegeege gctgcccagc aagtgcggcg tcgCcctgcc gtacaagatc agcaccaacg ttaactgcaa cacgattaat taagtgatga ggcgtcctgt gcgcgtccgg gcgaggaatg catgcatggc gctggcggag agtaataaaa taatgctact ggtattttaa gctatatcga ggtgtgcctg 600 660 tctctagtca tttattatgg tgtttaggaa tggtctacac agttcgtaac ggtgtatcgt ggatgcatgt tgccgcgagc agagtacgta ggcatgaacc gatgtgtgcg cttctgtctg 720 780 tttactctct ctatgtagta atgtgtgggt gctttgatcc agatgtattc gctcgtgagt cgtggaagta gatcgtttca gtg
- (2) INFORMATION FOR SEQ ID NO:3747:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 163 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..163
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578043
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3747:

Leu Leu His Cys Thr Thr Leu Pro Cys His His Ile Val Arg Glu Pro 20 25 30

Gly Arg Ala Arg Xaa Xaa Glu Arg His Gly Cys Ser Glu Ala Arg Asp 35 40 45

Ala Gly Ala Gly Arg Ala Pro Gly Gly Asp Arg Gly Gly Ser Pro Gly 50 60

Arg Gly Ala Arg Gly Asp Val Val Leu His Arg Val Gln His Ala Asp 65 70 75 80

Ala Val Pro Ala Val Arg Pro Asp Gly Arg Gly His Ala Ala Pro Ala 85 90 95

Val Leu Arg Arg His Pro Gln Pro Ala Ala Ala Ala Asn Asn Thr Pro 100 105 110

Asp Arg Arg Thr Ile Cys Gly Cys Leu Lys Asn Val Ala Asn Gly Ala 115 120 125

Asn Gly Ser Gly Thr Tyr Ile Ser Xaa Ala Ala Ala Leu Pro Ser Lys
130
135
140

Cys Gly Val Ala Leu Pro Tyr Lys Ile Ser Thr Asn Val Asn Cys Asn 145 150 155 160

Thr Ile Asn

- (2) INFORMATION FOR SEQ ID NO:3748:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 164 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..164
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578044
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3748:
- Ser Pro Gln His Gln Asn Pro Arg Ile Thr Asp Ala Ser Ile Ser Ala 1 5 10 15
- Cys Cys Thr Ala Leu Pro Cys Pro Ala Ile Ile Ser Tyr Val Ser Pro 20 25 30
- Ala Glu Arg Glu Xaa Gly Arg Gly Met Ala Ala Pro Lys Leu Ala Thr 35 40 45
- Leu Ala Leu Ala Val Leu Leu Ala Ala Thr Val Val Ala Pro Pro Ala 50 55 60
- Ala Val Arg Ala Ala Met Ser Cys Ser Thr Val Tyr Ser Thr Leu Met 65 70 75 80
- Pro Cys Leu Pro Phe Val Gln Met Gly Gly Ala Met Pro Pro Gln Pro 85 90 95
- Cys Cys Gly Gly Ile Arg Ser Leu Leu Gln Gln Pro Thr Thr Pro Pro 100 105 110
- Thr Ala Ala Leu Ser Ala Ala Ala Ser Arg Thr Ser Pro Thr Ala Pro 115 120 125
- Thr Gly Ala Ala Pro Thr Ser Ala Xaa Pro Pro Arg Cys Pro Ala Ser 130 135 140
- Ala Ala Ser Pro Cys Arg Thr Arg Ser Ala Pro Thr Leu Thr Ala Thr 145 150 155 160

Arg Leu Ile Lys

- (2) INFORMATION FOR SEQ ID NO:3749:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 124 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..124
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578045
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3749:
- Met Ala Ala Pro Lys Leu Ala Thr Leu Ala Leu Ala Val Leu Leu Ala 1 5 10 15
- Ala Thr Val Val Ala Pro Pro Ala Ala Val Arg Ala Ala Met Ser Cys 20 25 30
- Ser Thr Val Tyr Ser Thr Leu Met Pro Cys Leu Pro Phe Val Gln Met 35 40 45
- Gly Gly Ala Met Pro Pro Gln Pro Cys Cys Gly Gly Ile Arg Ser Leu 50 55 60
- Leu Gln Gln Pro Thr Thr Pro Pro Thr Ala Ala Leu Ser Ala Ala Ala 65 70 75 80
- Ser Arg Thr Ser Pro Thr Ala Pro Thr Gly Ala Ala Pro Thr Ser Ala 85 90 95
- Xaa Pro Pro Arg Cys Pro Ala Ser Ala Ala Ser Pro Cys Arg Thr Arg 100 105 110
- Ser Ala Pro Thr Leu Thr Ala Thr Arg Leu Ile Lys 115 120
- (2) INFORMATION FOR SEQ ID NO:3750:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 667 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..667
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578056
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3750: aatcgtccat ccgtatttcc gtcacaactc acaacccgag ccccccaaac ccgaagcagc 60 aggagetece etgacettge teegeeteeg atcaaggaaa aggaagatga getactaegg 120 180 ccagcagece eccgteggeg tecegeegea geaaggetae eeggggaagg aeggetaeee gccagcGggg taccccGCcg gccggctacc ccccgccggc gcagggctac ccgcagcagg 240 gttacccaca gcagggctac ccgccgcagt acgcgcaGcc gcctccacag cagcagcaga 300 gcagcgggcc ttccttcatg gaaggatgct tggctgccct ctgctgctgc tncctcctgg 360 acgcctgctt ctgacggatc catcgtgccg ggttcaacac ggctgcaagt gaagcaacaa 420 gettaeggaa gagetggaae tgggeegtge tattetaget ttgteetgeg ttategeeet 480 cttttctttt cttttctttt ttttttctct ctctctctct ctctgttata agactactgg 540 600 tactctgtcg atgtcgattg gattagacta gggctggtgt gtattctgtg gatgctccgt gtttctggtg ggattcaagt tcaaacctgg gattattgta tttcttctac ctgttactct 660 gttgccg
- (2) INFORMATION FOR SEQ ID NO:3751:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 176 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..176
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578057
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3751: Asn Arg Pro Ser Val Phe Pro Ser Gln Leu Thr Thr Arg Ala Pro Gln 10 5 Thr Arg Ser Ser Arg Ser Ser Pro Asp Leu Ala Pro Pro Pro Ile Lys 30 25 20 Glu Lys Glu Asp Glu Leu Leu Arg Pro Ala Ala Pro Arg Arg Pro 40 Ala Ala Ala Arg Leu Pro Gly Glu Gly Arg Leu Pro Ala Ser Gly Val 55 Pro Arg Arg Pro Ala Thr Pro Arg Arg Arg Arg Ala Thr Arg Ser Arg 75 70 Val Thr His Ser Arg Ala Thr Arg Arg Ser Thr Arg Ser Arg Leu His 90 85 Ser Ser Ser Arg Ala Ala Gly Leu Pro Ser Trp Lys Asp Ala Trp Leu 110 105 100 Pro Ser Ala Ala Ala Xaa Ser Trp Thr Pro Ala Ser Asp Gly Ser Ile 125 120 Val Pro Gly Ser Thr Arg Leu Gln Val Lys Gln Gln Ala Tyr Gly Arg 140 135 Ala Gly Thr Gly Pro Cys Tyr Ser Ser Phe Val Leu Arg Tyr Arg Pro 155

Leu Phe Phe Ser Phe Leu Phe Phe Phe Ser Leu Ser Leu Leu

170

175

(2) INFORMATION FOR SEQ ID NO:3752:

165

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 136 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..136
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578058
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3752:
- Ile Val His Pro Tyr Phe Arg His Asn Ser Gln Pro Glu Pro Pro Lys
 1 10 15
- Pro Glu Ala Ala Gly Ala Pro Leu Thr Leu Leu Arg Leu Arg Ser Arg 20 25 30
- Lys Arg Lys Met Ser Tyr Tyr Gly Gln Gln Pro Pro Val Gly Val Pro 35 40 45
- Pro Gln Gln Gly Tyr Pro Gly Lys Asp Gly Tyr Pro Pro Ala Gly Tyr 50 55 60
- Pro Ala Gly Arg Leu Pro Pro Ala Gly Ala Gly Leu Pro Ala Ala Gly 65 70 75 80
- Leu Pro Thr Ala Gly Leu Pro Ala Ala Val Arg Ala Ala Ala Ser Thr 85 90 95
- Ala Ala Ala Glu Gln Arg Ala Phe Leu His Gly Arg Met Leu Gly Cys 100 105 110
- Pro Leu Leu Leu Xaa Pro Pro Gly Arg Leu Leu Leu Thr Asp Pro Ser 115 120 125
- Cys Arg Val Gln His Gly Cys Lys 130 135
- (2) INFORMATION FOR SEQ ID NO:3753:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 101 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..101
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578059
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3753:
- Met Ser Tyr Tyr Gly Gln Gln Pro Pro Val Gly Val Pro Pro Gln Gln 1 5 15
- Gly Tyr Pro Gly Lys Asp Gly Tyr Pro Pro Ala Gly Tyr Pro Ala Gly 20 25 30
- Arg Leu Pro Pro Ala Gly Ala Gly Leu Pro Ala Ala Gly Leu Pro Thr 35 40 45
- Ala Gly Leu Pro Ala Ala Val Arg Ala Ala Ala Ser Thr Ala Ala Ala 50 55 60
- Glu Gln Arg Ala Phe Leu His Gly Arg Met Leu Gly Cys Pro Leu Leu
 65 70 75 80
- Leu Xaa Pro Pro Gly Arg Leu Leu Leu Thr Asp Pro Ser Cys Arg Val 85 90 95

Gln His Gly Cys Lys

- (2) INFORMATION FOR SEQ ID NO:3754:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 678 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..678
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578070
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3754:
- atgccacaac aagacccaga acccacaatc tttctttgtg cacagaaaga agaaagaacc tatggcacag tcgtcgtccg cctccgtcaa gctgctggtt ctggttgtcc tccctgcgct

cetectgtte etegtecaag egeaargrge teggeeageg geggegaaca egaegaeeee 180 gacccccgcc accaccaccg ggtgcgcggc gtcgagcgtg acggtgtcgc agtccaacac 240 gggcgacagg gccgggtacg acccggtgtt cgaggtgacg gtgagcaacg cctgccgCtg 300 egeegteege geegtgegee teegeteega GGgettegee ageteggtge eegtggaeee 360 gegeetgtte egeegegeeg geegegaeta eetegtegee gaeggeegee ggategagee 420 480 cGgcgccgac gcgcgcttcc gCtacgcctg ggaccgcgcc ttccggatga ccgccgccgc 540 cgtgcgcgac gactgctcct gatggagtga gtgagtgcgg tagctcctgc ctgcaacgag 600 tgaattgcag tagctcctgt ccttcgtgag agagagagac tcgctctgtc gtgatccaca gggaatttac ctcggtttta cgcttgttta ttagcgcttc ttcttaacgt attggctagt 660 tcqctqqatc atacttcg

- (2) INFORMATION FOR SEQ ID NO:3755:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 169 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..169
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578071
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3755:

 Met Pro Gln Gln Asp Pro Glu Pro Thr Ile Phe Leu Cys Ala Gln Lys

 1 10 15

Glu Glu Arg Thr Tyr Gly Thr Val Val Val Arg Leu Arg Gln Ala Ala
20 25 30

Gly Ser Gly Cys Pro Pro Cys Ala Pro Pro Val Pro Arg Pro Ser Ala 35 40 45

Xaa Xaa Ser Ala Ser Gly Gly Glu His Asp Asp Pro Asp Pro Arg His 50 55 60

His His Arg Val Arg Gly Val Glu Arg Asp Gly Val Ala Val Gln His 65 70 75 80

Gly Arg Gln Gly Arg Val Arg Pro Gly Val Arg Gly Asp Gly Glu Gln 85 90 95

Arg Leu Pro Leu Arg Arg Pro Arg Arg Ala Pro Pro Leu Arg Gly Leu 100 105 110

Arg Gln Leu Gly Ala Arg Gly Pro Ala Pro Val Pro Pro Arg Arg Pro
115 120 125

Arg Leu Pro Arg Arg Arg Pro Pro Asp Arg Ala Arg Arg Arg Arg 130 135 140

Ala Leu Pro Leu Arg Leu Gly Pro Arg Leu Pro Asp Asp Arg Arg 145 150 155 160

Arg Ala Arg Arg Leu Leu Met Glu 165

- (2) INFORMATION FOR SEQ ID NO:3756:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 166 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..166
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578073
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3756:

Cys His Asn Lys Thr Gln Asn Pro Gln Ser Phe Phe Val His Arg Lys $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Lys Lys Glu Pro Met Ala Gln Ser Ser Ser Ala Ser Val Lys Leu Leu 20 25 30

Val Leu Val Val Leu Pro Ala Leu Leu Phe Leu Val Gln Ala Gln

```
40
                                                 45
        35
Xaa Ala Arg Pro Ala Ala Ala Asn Thr Thr Thr Pro Thr Pro Ala Thr
                                             60
                         55
Thr Thr Gly Cys Ala Ala Ser Ser Val Thr Val Ser Gln Ser Asn Thr
                                         75
                    70
Gly Asp Arg Ala Gly Tyr Asp Pro Val Phe Glu Val Thr Val Ser Asn
                                     90
Ala Cys Arg Cys Ala Val Arg Ala Val Arg Leu Arg Ser Glu Gly Phe
                                 105
Ala Ser Ser Val Pro Val Asp Pro Arg Leu Phe Arg Arg Ala Gly Arg
                                                 125
                            120
        115
Asp Tyr Leu Val Ala Asp Gly Arg Arg Ile Glu Pro Gly Ala Asp Ala
                                             140
                        135
    130
Arg Phe Arg Tyr Ala Trp Asp Arg Ala Phe Arg Met Thr Ala Ala Ala
                                         155
                    150
Val Arg Asp Asp Cys Ser
                165
(2) INFORMATION FOR SEQ ID NO:3757:
```

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 878 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..878
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578083
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3757: aaggcacgcg ccgagcgagc acgccatcaa cgggcgcagg tacgccctgg agctgcagat ggtgcaccag agcgacacca acaggtacgc cgtggtctcg cagctctaca ggatctcgcg 120 180 geggegteet gacaggacca tteacagget ggageggtae ateeggagga teategegag 240 gaggaagaac cacgaggagc tcatcgacga ggaggtggac ccgcggcggc cggtgagccg gagcacggcc tactacaagt acacgggctc cttcacgaca ccgccctgca cggagggcgt 300 gacgtgggta gtggcgcacc agacacggcg ggtgacgcgg cgccaggtca ggctgctgcg 360 gaacscgtcc acgacggcac caggagcaac aggaggccac tccaggaagc caacggCcag 420 ggccatcacc ttctactaca cytcgccggc gcacggccga ggggcgaacg gggactagca 480 cgcattgcaa ggagacggcc ggcggaatct tggcgtcccc gtgctccttt tctgtccagg 540 600 cgacacagge catggccaag caaactettg catgtgateg atgtecgaca gtgttaggte 660 agagtgcaga ccaattttt tttctctcca gcgatcatca attcgttgcg gagtaatgct 720 gtagtgcgat tgcatatttg cattggcaag tgagtttgtg ccaaaaaaaa ggacatcaaa ttagtagaac gtttgcggtt tacactcctt gttccgtgac tgagtgagcg aattgcaatc 780 tcgaaaatca tgtgattcta aggatagcac gtctgccaca tgtaagggtg aaaacgatcg 840 gtaacggtcg gaaaaaatct ctcaccgttt ttactcgc
- (2) INFORMATION FOR SEQ ID NO:3758:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 158 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..158
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578084
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3758:
- Arg His Ala Pro Ser Glu His Ala Ile Asn Gly Arg Arg Tyr Ala Leu 1 5 10 15
- Glu Leu Gln Met Val His Gln Ser Asp Thr Asn Arg Tyr Ala Val Val 20 25 30 Ser Gln Leu Tyr Arg Ile Ser Arg Arg Arg Pro Asp Arg Thr Ile His

120

180

240

```
40
                                               45
       35
Arg Leu Glu Arg Tyr Ile Arg Arg Ile Ile Ala Arg Arg Lys Asn His
                       55
Glu Glu Leu Ile Asp Glu Glu Val Asp Pro Arg Arg Pro Val Ser Arg
                                      75
                   70
Ser Thr Ala Tyr Tyr Lys Tyr Thr Gly Ser Phe Thr Thr Pro Pro Cys
                                  90
Thr Glu Gly Val Thr Trp Val Val Ala His Gln Thr Arg Arg Val Thr
           100
                              105
Arg Arg Gln Val Arg Leu Leu Arg Asn Xaa Ser Thr Thr Ala Pro Gly
                                              125
             120
Ala Thr Gly Gly His Ser Arg Lys Pro Thr Ala Arg Ala Ile Thr Phe
                      135
                                       140
    130
Tyr Tyr Xaa Ser Pro Ala His Gly Arg Gly Ala Asn Gly Asp
                                       155
                  150
(2) INFORMATION FOR SEQ ID NO: 3759:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 139 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..139
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578085
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3759:
Met Val His Gln Ser Asp Thr Asn Arg Tyr Ala Val Val Ser Gln Leu
                                   10
               5
Tyr Arg Ile Ser Arg Arg Arg Pro Asp Arg Thr Ile His Arg Leu Glu
                               25
            20
Arg Tyr Ile Arg Arg Ile Ile Ala Arg Arg Lys Asn His Glu Glu Leu
                           4.0
lle Asp Glu Glu Val Asp Pro Arg Arg Pro Val Ser Arg Ser Thr Ala
                        55
Tyr Tyr Lys Tyr Thr Gly Ser Phe Thr Thr Pro Pro Cys Thr Glu Gly
                   70
                                       75
Val Thr Trp Val Val Ala His Gln Thr Arg Arg Val Thr Arg Arg Gln
                                   90
               8.5
Val Arg Leu Leu Arg Asn Xaa Ser Thr Thr Ala Pro Gly Ala Thr Gly
           100 105
Gly His Ser Arg Lys Pro Thr Ala Arg Ala Ile Thr Phe Tyr Tyr Xaa
                          120
Ser Pro Ala His Gly Arg Gly Ala Asn Gly Asp
                       135
 (2) INFORMATION FOR SEQ ID NO:3760:
      (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 951 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: DNA (genomic)
     (ix) FEATURE:
           (A) NAME/KEY: -
           (B) LOCATION: 1..951
           (D) OTHER INFORMATION: / Ceres Seq. ID 1578086
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3760:
```

acceatgtte etgtteceae actegactgt catcetgtga tateegeteg ceagtegeea etcegttteg geatteegee tecteeegae acacetettt aactegette egttteeaaa aaaatgetee agttaattta ateeagaega ggaategeet egeegeggat eteteegete geegaeaaga eccegetateg geteegegg gaagaetege actaeggtgg ggegegtege

cgccgctcgg cacgtggctc gtcggttcga cgttcgcttg tggaggtcgt cggggccagc 300 ggtgccgggg caatgcggtc agtttgtgga gccgtctgar gcgcttggct gggatctgag 360 ggtgtcaggt arggggcgcg asragctctg tcggtgggga rttggtggtg gttgtagcgt 420 agggcGcgtc gcgtgtttgg ctgccgggat ggagcacgta gttgggggca agttcaagct 480 tgggaagaag atcgggagcg gatcatttgg ggagctctac ctcggcgtga acatgcagag 540 tgacgaggag gtggctgtca aactggtatt ccacgaacat cttccacgtg atttttgtgt 600 660 ccactatcca tgtcttggtg aacagttctg tgttagacct tctccaaccg cacccccaa acctcccctc acccttgcta ttgctaccga cctactgtgt actatggggg gaagtatctt 720 ttaggatgat gtagtaaaat ataatagaaa atacagatat gaggaaaaaa tatgggggaa 780 atggttggag atggtcttag gagttaactt tagtcggagt cactgaaatc tatagttagc 840 900 ctaattgctt gcaggagcta atgagcctgt agcactctga agtgagggta tcaatgctga aaagcaccca ctggaaactc atctcttgtt tgttctgatt ggattattct c

- (2) INFORMATION FOR SEQ ID NO:3761:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 118 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..118
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578087

Pro Val Ala Thr Pro Phe Arg His Ser Ala Ser Ser Arg His Thr Ser 20 25 30

Leu Thr Arg Phe Arg Phe Gln Lys Asn Ala Pro Val Asn Leu Ile Gln 35 40 45

Thr Arg Asn Arg Leu Ala Ala Asp Leu Ser Ala Arg Arg Gln Asp Pro
50 55 60

Leu Ser Ala Pro Ala Gly Arg Leu Ala Leu Arg Trp Gly Ala Ser Pro 65 70 75 80
Pro Leu Gly Thr Trp Leu Val Gly Ser Thr Phe Ala Cys Gly Gly Arg

85 90 95

Arg Gly Gln Arg Cys Arg Gly Asn Ala Val Ser Leu Trp Ser Arg Leu 100 105 110

Xaa Arg Leu Ala Gly Ile

115

- (2) INFORMATION FOR SEQ ID NO:3762:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 91 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..91
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578088
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3762:

Met Glu His Val Val Gly Gly Lys Phe Lys Leu Gly Lys Lys Ile Gly
1 5 10 15

Ser Gly Ser Phe Gly Glu Leu Tyr Leu Gly Val Asn Met Gln Ser Asp 20 25 30

Glu Glu Val Ala Val Lys Leu Val Phe His Glu His Leu Pro Arg Asp 35 40 45

Phe Cys Val His Tyr Pro Cys Leu Gly Glu Gln Phe Cys Val Arg Pro 50 55 60

Ser Pro Thr Ala Pro Pro Lys Pro Pro Leu Thr Leu Ala Ile Ala Thr

(ix) FEATURE:

(A) NAME/KEY: peptide(B) LOCATION: 1..158

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3765:

(D) OTHER INFORMATION: / Ceres Seq. ID 1578091

80 70 75 65 Asp Leu Leu Cys Thr Met Gly Gly Ser Ile Phe 85 (2) INFORMATION FOR SEQ ID NO:3763: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 63 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..63 (D) OTHER INFORMATION: / Ceres Seq. ID 1578089 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3763: Met Gln Ser Asp Glu Glu Val Ala Val Lys Leu Val Phe His Glu His 10 Leu Pro Arg Asp Phe Cys Val His Tyr Pro Cys Leu Gly Glu Gln Phe 30 25 20 Cys Val Arg Pro Ser Pro Thr Ala Pro Pro Lys Pro Pro Leu Thr Leu 40 45 35 Ala Ile Ala Thr Asp Leu Leu Cys Thr Met Gly Gly Ser Ile Phe 50 55 60 (2) INFORMATION FOR SEQ ID NO:3764: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 802 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..802 (D) OTHER INFORMATION: / Ceres Seq. ID 1578090 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3764: atacctgaaa cttcactgcc tttttgtcag gcacgctggt caggaaatca gtagcctgtt ttggctgctg ttgctaatca gttgggagag ggggagatgg ccaggaggaa catcggagtc 120 gcagtggact tctcgtcgtg cagcaaagcg gctttgcggt gggcgtcgac gaaccttgcg aggaacggcg acaggctcat actcatccac gtgaacagct cctgccagaa cgagcggggc gccgttcatc tctgggagca gagcggttcc ccattgatcc ctctggccga gttttcagac gtcgccagga catacggtgt gtcaccggac aaggagacga tcgagatcct cactcaagcg 360 gcaaatcata gagggatcga agtctttgca aaggtgttct acggcgaccc ggcaaagaag 420 ctgtacgaag cagccgacat ggtcccgctt agctgcatgg tggtcgggag cagaggacta 480 agcacgetca agagggetet gatggggage gtgaGcacgt atgttgtgaa ecacgeggee 540 tgccccgtga cggttgtgaa ggagatggtg tagcgtgttg aacaccgctg gttacaagct 600 tcaccctagc cagattgaat aagcgtgctt gataagcact gatcaggggg gatcttgcta 660 cttatacgac attttgtgct tgaaatttgg gtaactagga ccgggcagaa catatctatg 720 tcttgggctc atggcactga catctgaaca tatgccctaa gtctgttgta atcgcaaaat atttttgctt ataaaatcag tt (2) INFORMATION FOR SEQ ID NO:3765: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 158 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide

```
Met Ala Arg Arg Asn Ile Gly Val Ala Val Asp Phe Ser Ser Cys Ser
                                    10
Lys Ala Ala Leu Arg Trp Ala Ser Thr Asn Leu Ala Arg Asn Gly Asp
                                25
            20
Arg Leu Ile Leu Ile His Val Asn Ser Ser Cys Gln Asn Glu Arg Gly
                            40
Ala Val His Leu Trp Glu Gln Ser Gly Ser Pro Leu Ile Pro Leu Ala
                        55
Glu Phe Ser Asp Val Ala Arg Thr Tyr Gly Val Ser Pro Asp Lys Glu
                                         75
                    70
Thr Ile Glu Ile Leu Thr Gln Ala Ala Asn His Arg Gly Ile Glu Val
                                     90
Phe Ala Lys Val Phe Tyr Gly Asp Pro Ala Lys Lys Leu Tyr Glu Ala
                                                     110
                                105
            100
Ala Asp Met Val Pro Leu Ser Cys Met Val Val Gly Ser Arg Gly Leu
                            120
                                                 125
        115
Ser Thr Leu Lys Arg Ala Leu Met Gly Ser Val Ser Thr Tyr Val Val
                                            140
                        135
Asn His Ala Ala Cys Pro Val Thr Val Val Lys Glu Met Val
                                         155
                    150
```

- (2) INFORMATION FOR SEQ ID NO:3766:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 630 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..630
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578130
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3766: atgatggtgt caagetttgg gatettegga aattaagaaa ttttaggaee tteteect 60 atgattcaga tacgccaaca aatactgtgg aatttgattt tagtggAaaa ctatcttgcc 120 attggtggtt cagatataag ggtctaccaa gtagctaatg ttaaggccga atggaatctc 180 atcaagacat taccagattt atctggaaca gggaaagtaa cttcggtaaa gttcggagca 240 300 gatgetaagt acatageegt aggttetatg gacegeaate taeggatatt tggeeteect ggagacgacc aaatggagga atcaaccaca gcggcagagt gaggaaaatc catggttatc 360 agcattcatt gtctatttgg ccactgtcga gaggtaatcc acggagacac accgctggcg 420 cccgtgacac ttggcctgtt tggttacttg ctaaaaattg ctacacattt ttgtgccaca 480 cttgtttaag cacacttgtt taaggtgttt aaggttatac gctcaaattc cgcgtcacag 540 cttgtttgtc actcataaga gaatattgcc tgtaaaatga gagtctgaac gacttgcccg 600 taaaatgaga tggaaaatca gttagctgct
- (2) INFORMATION FOR SEQ ID NO: 3767:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..51
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578131
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3767:
- Asp Gly Val Lys Leu Trp Asp Leu Arg Lys Leu Arg Asp Phe Arg Thr 1 5 5 10 10 15 Phe Ser Pro Tyr Asp Ser Asp Thr Pro Thr Asp Thr Val Glu Phe Asp
- 20 25 30

 Phe Ser Gly Lys Leu Ser Cys His Trp Trp Phe Arg Tyr Lys Gly Leu
 35 40 45

Pro Ser Ser

- (2) INFORMATION FOR SEQ ID NO:3768:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 93 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..93
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578132
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3768:

Met Ile Gln Ile Arg Gln Gln Ile Leu Trp Asn Leu Ile Leu Val Glu
1 10 15

Asn Tyr Leu Ala Ile Gly Gly Ser Asp Ile Arg Val Tyr Gln Val Ala 20 25 30

Asn Val Lys Ala Glu Trp Asn Leu Ile Lys Thr Leu Pro Asp Leu Ser

Gly Thr Gly Lys Val Thr Ser Val Lys Phe Gly Ala Asp Ala Lys Tyr

Ile Ala Val Gly Ser Met Asp Arg Asn Leu Arg Ile Phe Gly Leu Pro

Gly Asp Asp Gln Met Glu Glu Ser Thr Thr Ala Ala Glu 85 90

- (2) INFORMATION FOR SEQ ID NO:3769:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 876 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..876
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578150
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3769:

atcagecete aegeatgtgg eaegegatgg geeggatetg aggttgagtg tgegateeeg 60 ttggcatatc gacaaagttt ggtgggtccc accgcagatc ccggcccggt aggtactagt 120 teegeegtee eeecteecta gteteegggg aggaeegtet eggeegegag agtgegeteg 180 tegactecae teagetetet egeteeetet eeteeecaa ggeeecagag acaggeagee 240 ggcgaggccc gccgccgcga aGcaatggat ttcaaggggt tctgggagtc cagattcggg 300 ggcaagaagg aacccgagcc ggagcagaac gggcacgcca acggggtcca gaaccagaag 360 aggacctccg atctggcggt ctacgagcag ttcgagcagc aggccaggca gacccaggtc 420 480 cgagccgccg cgattcgcga cggagacgct gatgtcataa gccccttcta ccttcatttg agtcagctga aatgcgtaat ctcgcagaga cattgttgag ggatattatt cgcgggagcc 540 cagatgtgaa atgggagagc atcaaaggac tggaaaatgc aaaacgcctt ctaaaagagg 600 ctgttgtcat gcccataaag tacccaaaat acttcactgg tctcctttct ccatggaaag 660 gcatcttact ttttggcccc ccagggacag gaaagacaat gctggcaaaa gcggtcgcta 720 ctgagtgcaa aaccaccttc ttcaacattt cagcatcatc aattgtcagc aaatggcgtg 780 gagattcaga gaagcttgtc aaagttctgt ttgagcttgc taggcatcat gcaccatcca 840 caatattcct tgatgaaata gatgctatca tcagcc

- (2) INFORMATION FOR SEQ ID NO:3770:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 84 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..84
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578151
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3770:

 Met Asp Phe Lys Gly Phe Trp Glu Ser Arg Phe Gly Gly Lys Lys Glu

 1 10 15
- Pro Glu Pro Glu Gln Asn Gly His Ala Asn Gly Val Gln Asn Gln Lys 20 25 30
- Arg Thr Ser Asp Leu Ala Val Tyr Glu Gln Phe Glu Gln Gln Ala Arg 35 40 45
- Gln Thr Gln Val Arg Ala Ala Ala Ile Arg Asp Gly Asp Ala Asp Val 50 55 60
- Ile Ser Pro Phe Tyr Leu His Leu Ser Gln Leu Lys Cys Val Ile Ser 65 70 75 80
- Gln Arg His Cys
- (2) INFORMATION FOR SEQ ID NO:3771:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..128
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578152
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3771:
- Met Arg Asn Leu Ala Glu Thr Leu Leu Arg Asp Ile Ile Arg Gly Ser 1 5 10 15
- Pro Asp Val Lys Trp Glu Ser Ile Lys Gly Leu Glu Asn Ala Lys Arg 20 25 30
- Leu Leu Lys Glu Ala Val Val Met Pro Ile Lys Tyr Pro Lys Tyr Phe 35 40 45
- Thr Gly Leu Leu Ser Pro Trp Lys Gly Ile Leu Leu Phe Gly Pro Pro 50 55 60
- Gly Thr Gly Lys Thr Met Leu Ala Lys Ala Val Ala Thr Glu Cys Lys 65 70 75 80
- Thr Thr Phe Phe Asn Ile Ser Ala Ser Ser Ile Val Ser Lys Trp Arg 85 90 95
- Gly Asp Ser Glu Lys Leu Val Lys Val Leu Phe Glu Leu Ala Arg His
 100 105 110
- His Ala Pro Ser Thr Ile Phe Leu Asp Glu Ile Asp Ala Ile Ile Ser 115 120 125
- (2) INFORMATION FOR SEQ ID NO:3772:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 89 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..89
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578153
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3772:
- Met Pro Ile Lys Tyr Pro Lys Tyr Phe Thr Gly Leu Leu Ser Pro Trp 1 5 10 15
- Lys Gly Ile Leu Leu Phe Gly Pro Pro Gly Thr Gly Lys Thr Met Leu

```
20 25 30

Ala Lys Ala Val Ala Thr Glu Cys Lys Thr Thr Phe Phe Asn Ile Ser 35

Ala Ser Ser Ile Val Ser Lys Trp Arg Gly Asp Ser Glu Lys Leu Val 50

Lys Val Leu Phe Glu Leu Ala Arg His His Ala Pro Ser Thr Ile Phe 65

Leu Asp Glu Ile Asp Ala Ile Ile Ser
```

- 85
 (2) INFORMATION FOR SEQ ID NO:3773:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 776 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..776
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578154
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3773: aaaagaatat ttagttgaag caaaattcaa gaaacttgaa gaagaggcct gcaatatttt 60 gtcctcgagt tctggtgaaa caatgaaaaa caacattgat gttttggttt gcaaagctga 120 atactaccac cagagtggag agtaccaaaa gtgttttAaa actcacatcc tcgttacttg 180 agagagaccc tttccatcta aagtgcacat tagttcattt ggcaactgca atggagcttg 240 gtcattccaa tgatctttat cttttagcat gcaacttagt gaaggattat cctgaaaaag 300 ctctttcatg gtttgctgtc ggttgctatt actactgtat taagaagtat gatcaagcgc 360 gaagatactt cggcaaagct acaggtttag atgggacgtt tcctcctgct tggattggta 420 480 caggcattgc ctatgctgct caagaggaag gtgaccaagc aatggctgca tttcggacgg 540 cagctcggtt atttcctgga tGgtcatctg ccaactttat acatgggcat gcaatatgtg cgaatgcama atttcaaacT ttgcagagca gttcttcaca caagcAaaat ccatctgccc 600 atctgatcca cttatttaca atgagttggg ggttgttgcg tataatatga aggagtaccg 660 aaaagcagtt cagttgtttg agttaacatt ggaccatact tcatcctctc tgaatgaaat 720 gtgggaacca acattggtga atcttgggca tgcacttcgg aaactcaagg aatatc
- (2) INFORMATION FOR SEQ ID NO:3774:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 183 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..183
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578155

										J. J.					
Met	Phe	Trp	Phe	Ala	Lys	Leu	Asn	Thr	Thr	Thr	Arg	Val	Glu	Ser	Thr
1				5					10					15	
Lvs	Ser	Val	Leu	Lys	Leu	Thr	Ser	Ser	Leu	Leu	Glu	Arg	Asp	Pro	Phe
_			20	_				25					30		
His	Leu	Lvs	Cvs	Thr	Leu	Val	His	Leu	Ala	Thr	Ala	Met	Glu	Leu	Gly
1120	200	35					40					45			
His	Ser	Asn	Asp	Leu	Tyr	Leu	Leu	Ala	Cys	Asn	Leu	Val	Lys	Asp	Tyr
	50		-		-	55					60				
Pro	Glu	Lvs	Ala	Leu	Ser	Trp	Phe	Ala	Val	Gly	Cys	Tyr	Tyr	Tyr	Cys
65		-1-			70	-				75					80
0.0													_	-	

Ile Lys Lys Tyr Asp Gln Ala Arg Arg Tyr Phe Gly Lys Ala Thr Gly
85 90 95

Leu Asp Gly Thr Phe Pro Pro Ala Trp Ile Gly Thr Gly Ile Ala Tyr
100 105 110

Ala Ala Gln Glu Glu Gly Asp Gln Ala Met Ala Ala Phe Arg Thr Ala

120 125 115 Ala Arg Leu Phe Pro Gly Trp Ser Ser Ala Asn Phe Ile His Gly His 130 135 140 Ala Ile Cys Ala Asn Ala Xaa Phe Gln Thr Leu Gln Ser Ser Ser 150 155 160 His Lys Gln Asn Pro Ser Ala His Leu Ile His Leu Phe Thr Met Ser 165 170 Trp Gly Leu Leu Arg Ile Ile 180 (2) INFORMATION FOR SEQ ID NO:3775: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 139 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..139 (D) OTHER INFORMATION: / Ceres Seq. ID 1578156 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3775: Met Glu Leu Gly His Ser Asn Asp Leu Tyr Leu Leu Ala Cys Asn Leu 5 10 Val Lys Asp Tyr Pro Glu Lys Ala Leu Ser Trp Phe Ala Val Gly Cys 20 25 Tyr Tyr Tyr Cys Ile Lys Lys Tyr Asp Gln Ala Arg Arg Tyr Phe Gly 40 Lys Ala Thr Gly Leu Asp Gly Thr Phe Pro Pro Ala Trp Ile Gly Thr 55 Gly Ile Ala Tyr Ala Ala Gln Glu Glu Gly Asp Gln Ala Met Ala Ala 7.5 70 Phe Arg Thr Ala Ala Arg Leu Phe Pro Gly Trp Ser Ser Ala Asn Phe 90 85 Ile His Gly His Ala Ile Cys Ala Asn Ala Xaa Phe Gln Thr Leu Gln 100 105 110 Ser Ser Ser Ser His Lys Gln Asn Pro Ser Ala His Leu Ile His Leu 115 120 125 Phe Thr Met Ser Trp Gly Leu Leu Arg Ile Ile 130 135 (2) INFORMATION FOR SEQ ID NO:3776: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 92 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..92 (D) OTHER INFORMATION: / Ceres Seq. ID 1578157 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3776: Met Val Ile Cys Gln Leu Tyr Thr Trp Ala Cys Asn Met Cys Glu Cys 10 5 Xaa Ile Ser Asn Phe Ala Glu Gln Phe Phe Thr Gln Ala Lys Ser Ile 25 20 Cys Pro Ser Asp Pro Leu Ile Tyr Asn Glu Leu Gly Val Val Ala Tyr 4.0 Asn Met Lys Glu Tyr Arg Lys Ala Val Gln Leu Phe Glu Leu Thr Leu 60 55 Asp His Thr Ser Ser Ser Leu Asn Glu Met Trp Glu Pro Thr Leu Val 75 70

Asn Leu Gly His Ala Leu Arg Lys Leu Lys Glu Tyr 85 90

- (2) INFORMATION FOR SEQ ID NO:3777:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 654 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..654
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578185
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3777: 60 tyatgctgat acagttggag acttgggata tgcatcagag cttggaaact atgcagagta 120 tagtggtgct cctaatgagg aggaggttct gaattattct agagttgttc ttgattgtgc 180 aactgctgat cctgatggcc gcaagagagc ccttctcatt ggaggtggca tagctaactt cactgatgtt gctaccacat tcaatggcat catccgagcc ttaagggaga aggaatccaa 240 gttgaagget teaagaatge acatttatgt eegeegaggt ggteeaaatt accaatetgg 300 actggctaaa atgcgtaaGc ttggtgcaga actcggcgtt ccaattgagg tgtatgggcc agaagcgact atgactggaa tetgcaaaca agcaattgaa tgcatcatgg etgcagcgta atcagagcgt aGcTctgNgg tagtttggga tctgcaaaca cgcaattgaa tgtgtcatgg actcagcata aatgagagat ggatagtagt tgcattatat agttcacaca tggtgtttct 540 gttttttgtt tcagatatgt tgtagcgtgt tgtttgaacg aaaccttcac agatcattac
- (2) INFORMATION FOR SEQ ID NO:3778:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 139 amino acids

tgcaaagaaa ttgctgtgtg ttaaaataaa ttcaaagtct agttttgtgc cttt

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..139
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578186
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3778:
- Xaa Ala Asp Thr Val Gly Asp Leu Gly Tyr Ala Ser Glu Leu Gly Asn 1 5 5 10 15 Tyr Ala Glu Tyr Ser Gly Ala Pro Asn Glu Glu Glu Val Leu Asn Tyr
- Tyr Ala Glu Tyr Ser Gly Ala Plo Ash Glu Glu Glu Val Edu Tibr Tyr
 20 25 30
- Ser Arg Val Val Leu Asp Cys Ala Thr Ala Asp Pro Asp Gly Arg Lys 35 40 45
- Arg Ala Leu Leu Ile Gly Gly Gly Ile Ala Asn Phe Thr Asp Val Ala 50 55 60
- Thr Thr Phe Asn Gly Ile Ile Arg Ala Leu Arg Glu Lys Glu Ser Lys 65 70 75 80
- Leu Lys Ala Ser Arg Met His Ile Tyr Val Arg Arg Gly Gly Pro Asn 85 90 95
- Tyr Gln Ser Gly Leu Ala Lys Met Arg Lys Leu Gly Ala Glu Leu Gly
 100 105 110
- Val Pro Ile Glu Val Tyr Gly Pro Glu Ala Thr Met Thr Gly Ile Cys
 115
 120
 125
 127
 128 Ala Ala Ala
- Lys Gln Ala Ile Glu Cys Ile Met Ala Ala Ala 130
- (2) INFORMATION FOR SEQ ID NO:3779:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 722 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..722
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578190
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3779: gaggacgaag gttcgttcag ttcaagacca gacgargagg aagagaggcg cgcaaggntc 60 cggtctcatg gcgcccttcc ccgccctccg ctcatcgtcg ccggtngccg ccgccgcggc 120 geegtegete ggtegegtgt eeggeeacge atetgeggeg eecageaaga ggegegtegt 180 ctcctgcagg gccgtcagca gcaggtcgct gtccatcatc aggtgcgagc agagcgcgaa 240 gaagggcggc gggccggaca catggctggg ccgcgcggcc atGGtbngcG ttcgcctccg 300 360 cgatcgccgt cgaggtggcc accggcaagg gcttcctcca ggtagggacc gtcgtagagt atgagtatca acgtaacatc gacagcagcg aggaacgccg aaacgcgtgc gtaacaaaca taccacgagt ttgttgtgga tggcgtgcag aacttgggcg tgggtactcc ggcgccgaAS STGGcgctgg ccgtgtcggg gctcgtcgtc ggcctcgccg tcttcttcct gctccagtcg 600 ggaggaggca cgcgagactg acggctgatg gaaccccatg agctgagagc acgcgcacgt cgaacatcgt ctccccactc gacatcagtt gctgtaatgg ttggtgaagt gaggatgaaa 660 acccagggca tatatcatca tcatcatgtc atgtgtaaca aagacgataa ctctcatgtg 720
- (2) INFORMATION FOR SEQ ID NO:3780:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 114 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..114
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578191
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3780:
- Glu Asp Glu Gly Ser Phe Ser Ser Arg Pro Asp Xaa Glu Glu Glu Arg 10 5 Arg Ala Arg Xaa Arg Ser His Gly Ala Leu Pro Arg Pro Pro Leu Ile

Val Ala Gly Xaa Arg Arg Arg Gly Ala Val Ala Arg Ser Arg Val Arg 40

Pro Arg Ile Cys Gly Ala Gln Gln Glu Ala Arg Arg Leu Leu Gln Gly 55

Arg Gln Gln Gln Val Ala Val His His Gln Val Arg Ala Glu Arg Glu 75 70

Glu Gly Arg Arg Ala Gly His Met Ala Gly Pro Arg Gly His Gly Xaa 90 85

Arg Ser Pro Pro Arg Ser Pro Ser Arg Trp Pro Pro Ala Arg Ala Ser 105 100

Ser Arg

- (2) INFORMATION FOR SEQ ID NO:3781:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 120 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..120
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578192
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3781:

Arg Thr Lys Val Arg Ser Val Gln Asp Gln Thr Xaa Arg Lys Arg Gly 10

Ala Gln Xaa Ser Gly Leu Met Ala Pro Phe Pro Ala Leu Arg Ser Ser 20 25 30

Ser Pro Xaa Ala Ala Ala Ala Pro Ser Leu Gly Arg Val Ser Gly 35 40 45

His Ala Ser Ala Ala Pro Ser Lys Arg Arg Val Val Ser Cys Arg Ala 50 55 60

Val Ser Ser Arg Ser Leu Ser Ile Ile Arg Cys Glu Gln Ser Ala Lys 65 70 75 80

Lys Gly Gly Gly Pro Asp Thr Trp Leu Gly Arg Ala Ala Met Xaa Xaa 85 90 95

Val Arg Leu Arg Asp Arg Arg Gly Gly His Arg Gln Gly Leu Pro 100 105 110

Pro Gly Arg Asp Arg Arg Arg Val 115 120

- (2) INFORMATION FOR SEQ ID NO:3782:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 192 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..192
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578193
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3782:

Gly Arg Arg Phe Val Gln Phe Lys Thr Arg Arg Xaa Gly Arg Glu Ala 1 5 10 $\frac{15}{1}$

Arg Lys Xaa Pro Val Ser Trp Arg Pro Ser Pro Pro Ser Ala His Arg 20 25 30

Arg Arg Xaa Pro Pro Pro Arg Arg Arg Ser Val Ala Cys Pro Ala 35 40 45

Thr His Leu Arg Arg Pro Ala Arg Gly Ala Ser Ser Pro Ala Gly Pro 50 55 60
Ser Ala Ala Gly Arg Cys Pro Ser Ser Gly Ala Ser Arg Ala Arg Arg

65 70 75 80
Arg Ala Ala Gly Arg Thr His Gly Trp Ala Ala Arg Pro Trp Xaa Ala

85 90 95
Phe Ala Ser Ala Ile Ala Val Glu Val Ala Thr Gly Lys Gly Phe Leu
100 105 110

Gln Val Gly Thr Val Val Glu Tyr Glu Tyr Gln Arg Asn Ile Asp Ser 115 120 125

Ser Glu Glu Arg Arg Asn Ala Cys Val Thr Asn Ile Pro Arg Val Cys 130 135 140

Cys Gly Trp Arg Ala Glu Leu Gly Arg Gly Tyr Ser Gly Ala Glu Xaa 145 150 155 160

Gly Ala Gly Arg Val Gly Ala Arg Arg Pro Arg Arg Leu Leu Pro
165 170 175

Ala Pro Val Gly Arg Arg His Ala Arg Leu Thr Ala Asp Gly Thr Pro
180 185 190

- (2) INFORMATION FOR SEQ ID NO:3783:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 741 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -

- (B) LOCATION: 1..741
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578201
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3783:

atgagtetat tteagegget tegegttete tgtattttea tattategaa accetegtet 60 acatctccgt ttcgacgaag ccaaatctgt cgtgttttat aatcccaaaa gtctccacct 120 aagtcaccga ctcgatacgg caagatcgac agagagaccg acgcgccggc agatcccaag 180 ctcaccggag agggggaaga gggcgaccga agcggcgatg ggtttcatca tggacttcgc 240 300 ggagaatctg atcctccgtc tgatggagga cccggacaag cgcgaccCag gttcggcggg 360 agcatgtcta caagatgaag gagcggtgcg agcgcactaa ggcggcgtgg agcctccctc 420 tgcgcccCta cggcttctgg accttcgacc gcttcaactc gcagctctcc tgggatcccc agatcagcca ggccgccggc Cgtcgggacc cctacgacga cctcatcgcc cgccactctg 480 540 getegeegee gtetteetga acaecegtte egatetttge eeagaaggte taettgggGe atcaataaga aactetttee eetcaaactg attgtggtte cateetette tgtetggaaa 600 660 atgttgtcac caaactaccc tatttcctgt tccagtttgg catggaagta taagttgtgt acttctattc tcaagttgtt gtctttgtat tatgaaatgt ttccaataat cagcagtttt 720 tgatgtatgg tcgtggatcc g

- (2) INFORMATION FOR SEQ ID NO:3784:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 40 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..40
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578202
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3784:

Met Gly Phe Ile Met Asp Phe Ala Glu Asn Leu Ile Leu Arg Leu Met 1 5 10 15 Glu Asp Pro Asp Lys Arg Asp Pro Gly Ser Ala Gly Ala Cys Leu Gln

Glu Asp Pro Asp Lys Arg Asp Pro Gly Ser Ala Gly Ala Cys Led Gli 20 25 30

Asp Glu Gly Ala Val Arg Ala His 35 40

- (2) INFORMATION FOR SEQ ID NO:3785:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..61
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578203
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3785:

Met Lys Glu Arg Cys Glu Arg Thr Lys Ala Ala Trp Ser Leu Pro Leu 1 5 10 15

Arg Pro Tyr Gly Phe Trp Thr Phe Asp Arg Phe Asn Ser Gln Leu Ser 20 25 30

Trp Asp Pro Gln Ile Ser Gln Ala Ala Gly Arg Arg Asp Pro Tyr Asp 35 40 45

Asp Leu Ile Ala Arg His Ser Gly Ser Pro Pro Ser Ser 50 55 60

- (2) INFORMATION FOR SEQ ID NO:3786:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 40 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..40
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578204
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3786:

 Met Leu Ser Pro Asn Tyr Pro Ile Ser Cys Ser Ser Leu Ala Trp Lys

 1 10 15

Tyr Lys Leu Cys Thr Ser Ile Leu Lys Leu Leu Ser Leu Tyr Tyr Glu
20 25 30

Met Phe Pro Ile Ile Ser Ser Phe 35 40

- (2) INFORMATION FOR SEQ ID NO:3787:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 765 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..765
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578239
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3787: gacaagcaag aacagctgtc gatccaattg tcacttgctc tccctccaac aagctaatta 60 aggccggtca tccctcttct agctcgtttc attatccatg gcggaggaga agcaccacca 120 180 ccaccacctg ttccaccaca agaaggacga ggagcaggag gagcagctcg ccggcggsgg 240 tacgGcgagt ccgccgagta cacggaggcc acggtgacgg aggtcgtgtc cacgggcgag 300 aacgagtacg acgagtacaa gaaggaggag aagcagcaca agcacaagca gcacctcggc 360 gaggccggcg ccatcGccgc cggcgccttc gcactctacg agaagcacga ggcaaagaag gacceggage acgegeaccg ccacaagate gaggaggagg tegeggegge ggeggeegte 420 ggctccggcg gCttcgcCtt ccacgagcac cacgagaaga agaaggacca caaggacgcc 480 gaggaggccg gcggcgagaa gaagcaccac ttcttcggct gattgatcct cccgtatcgt 540 cgtcccCtcc ccgtgtgCta cgcgtgcCgt gtgtgagagt gatatcgagc gccCgccgtg ttgtgcgcgc gtacgtatgt atgcgctcgt gtgatgcacg aataagcgtg gctacgtaat 660 ctatcgtatg tatacgtgtg tgtatgcatg tgcttgtgta tgatcgtggt acgaggaccg 720 aaaaaatgta tgcaactctg atttacttac atgtttagtt gtttc
- (2) INFORMATION FOR SEQ ID NO: 3788:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 218 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..218
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578240
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3788:
- Gln Ala Arg Thr Ala Val Asp Pro Ile Val Thr Cys Ser Pro Ser Asn 1 5 10
- Lys Leu Ile Lys Ala Gly His Pro Ser Ser Ser Ser Phe His Tyr Pro 20 25 30
- Trp Arg Arg Arg Ser Thr Thr Thr Thr Cys Ser Thr Thr Arg Arg 35 40 45
- Thr Arg Ser Arg Arg Ser Ser Ser Pro Ala Xaa Val Arg Arg Val Arg
 50 55 60
- Arg Val His Gly Gly His Gly Asp Gly Gly Arg Val His Gly Arg Glu
 65 75 80
- Arg Val Arg Arg Val Gln Glu Gly Gly Glu Ala Ala Gln Ala Gln Ala 85 90 95
 Ala Pro Arg Arg Gly Arg Arg His Arg Arg Arg Arg Leu Arg Thr Leu

```
105
                                                    110
            100
Arg Glu Ala Arg Gly Lys Glu Gly Pro Gly Ala Arg Ala Pro Pro Gln
                                               125
                           120
Asp Arg Gly Gly Gly Arg Gly Gly Gly Arg Arg Leu Arg Arg Leu
                        135
Arg Leu Pro Arg Ala Pro Arg Glu Glu Glu Gly Pro Gln Gly Arg Arg
                                        155
                    150
Gly Gly Arg Arg Glu Glu Ala Pro Leu Leu Arg Leu Ile Asp Pro
                                   170
               165
Pro Val Ser Ser Pro Pro Arg Val Leu Arg Val Pro Cys Val Arg
            180
                                185
Val Ile Ser Ser Ala Arg Arg Val Val Arg Ala Tyr Val Cys Met Arg
                           200
       195
Ser Cys Asp Ala Arg Ile Ser Val Ala Thr
                       215
    210
(2) INFORMATION FOR SEQ ID NO:3789:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 822 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..822
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578247
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3789:
arggtccctg gctatcgaga gaactcgacg agttcatctc catcgtttgt gagagtttcg
                                                                      120
gttgggccag attgtcatac tcagcgtcct gcctcggtct caggcccagg gtgtactgaa
                                                                      180
agccagetet tgcccgcate tacacggece cattttcage ttgcccctcc agaaccgggt
cctatctgtg gtgtgccaga cttcaagatg aggggaaaga agagtgatga gctcgaacct
                                                                      240
gtcgatgctk gcgatgaaga tgatgatggt ggtgacgatg gggacgagga tggtgacttt
                                                                      300
                                                                      360
ggggaggagg gtgaagagga cgtctcagaa ggggagggat atgacaaccc aaagggcaat
gagaccaaga agcaaagagg tgatcctgag gaaaatggtg aggaagatga ggaagaacca
                                                                      420
gaagatcagg agggtggcgg cgacgacgat gatgacgacg atgacgatga tgagaacggg
                                                                      480
gatgacgagg acgacgacaa tDggggatga cgatgaggag ggtgtagatg aagaagacga
                                                                      540
tgaccaggac gaggatgagg aggaagatga tgatgaagac tcgctccagc ccccaaagaa
                                                                      600
gaggaagaag tgaagatett etgeegettt agttacegtg egetgagtte tgeetggett
                                                                      660
ttcgtcatat cctcgcattt caactttccc atagagagtt aagaaggatc cacacgttca
                                                                      720
gcagcacgtg tgggcttgta ggagctttat gatttgaggc aattagggac aactcttatg
                                                                      780
tcattgttgc ttgcttctgt ggagtcgaac agatgtttcg ct
 (2) INFORMATION FOR SEQ ID NO:3790:
      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 169 amino acids
           (B) TYPE: amino acid
           (C) STRANDEDNESS:
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: peptide
     (ix) FEATURE:
           (A) NAME/KEY: peptide
           (B) LOCATION: 1..169
           (D) OTHER INFORMATION: / Ceres Seq. ID 1578248
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3790:
 Xaa Val Pro Gly Tyr Arg Glu Asn Ser Thr Ser Ser Ser Pro Ser Phe
                                     10
 Val Arg Val Ser Val Gly Pro Asp Cys His Thr Gln Arg Pro Ala Ser
                                 25
             20
 Val Ser Gly Pro Gly Cys Thr Glu Ser Gln Leu Leu Pro Ala Ser Thr
```

35 40 45
Arg Pro His Phe Gln Leu Ala Pro Pro Glu Pro Gly Pro Ile Cys Gly

```
Val Pro Asp Phe Lys Met Arg Gly Lys Lys Ser Asp Glu Leu Glu Pro
                                      75
Val Asp Ala Xaa Asp Glu Asp Asp Asp Gly Gly Asp Asp Glu
                                 90
Asp Gly Asp Phe Gly Glu Glu Gly Glu Glu Asp Val Ser Glu Gly Glu
```

Gly Tyr Asp Asn Pro Lys Gly Asn Glu Thr Lys Lys Gln Arg Gly Asp 120

Pro Glu Glu Asn Gly Glu Glu Asp Glu Glu Glu Pro Glu Asp Gln Glu 140 135

Gly Gly Gly Asp Asp Asp Asp Asp Asp Asp Asp Asp Glu Asn Gly 155 150

Asp Asp Glu Asp Asp Asp Asn Xaa Gly 165

- (2) INFORMATION FOR SEQ ID NO: 3791:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..128
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578249
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3791: Met Ser Ser Asn Leu Ser Met Xaa Ala Met Lys Met Met Met Val Val 5 10 Thr Met Gly Thr Arg Met Val Thr Leu Gly Arg Arg Val Lys Arg Thr 30 25 20 Ser Gln Lys Gly Arg Asp Met Thr Thr Gln Arg Ala Met Arg Pro Arg 40 Ser Lys Glu Val Ile Leu Arg Lys Met Val Arg Lys Met Arg Lys Asn 5.5 Gln Lys Ile Arg Arg Val Ala Ala Thr Thr Met Met Thr Thr Met Thr 70 75 Met Met Arg Thr Gly Met Thr Arg Thr Thr Thr Xaa Gly Asp Asp Asp 90 85 Glu Glu Gly Val Asp Glu Glu Asp Asp Asp Gln Asp Glu Asp Glu Glu 100 105 110 Glu Asp Asp Asp Glu Asp Ser Leu Gln Pro Pro Lys Lys Arg Lys

120

- (2) INFORMATION FOR SEQ ID NO:3792:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 122 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..122
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578250
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3792:
- Met Xaa Ala Met Lys Met Met Met Val Val Thr Met Gly Thr Arg Met 5 10
- Val Thr Leu Gly Arg Arg Val Lys Arg Thr Ser Gln Lys Gly Arg Asp 25
- Met Thr Thr Gln Arg Ala Met Arg Pro Arg Ser Lys Glu Val Ile Leu

```
40
        35
Arg Lys Met Val Arg Lys Met Arg Lys Asn Gln Lys Ile Arg Arg Val
                       55
Ala Ala Thr Thr Met Met Thr Thr Met Thr Met Met Arg Thr Gly Met
                                       75
                   70
Thr Arg Thr Thr Xaa Gly Asp Asp Glu Glu Gly Val Asp Glu
                                   90
               85
Glu Asp Asp Asp Gln Asp Glu Asp Glu Glu Glu Asp Asp Asp Glu Asp
                                                  110
                               105
           100
Ser Leu Gln Pro Pro Lys Lys Arg Lys Lys
       115
                           120
```

- (2) INFORMATION FOR SEQ ID NO:3793:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 928 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..928
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578255
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3793: aagacagcaa ccacatgctc accagtgcat gcccccgaag caaaagactt gctggatatc 60 accaaagatt aggttaagaa gcagctcgag ccgcccttcc ttccagtccc atggccgcgc 120 ccgcttcttc ggttacctcc agaggcttgg cactccgtag cagtacctcc gtgggttttc 180 ategecaceg egggaataat eeggtgatea geecegegte ttetegtege egacgaagee 240 ttactggtgg atcaacgatg aactcctcgg gcatgaacgg tgccttccct cctatcaaag 300 gaagtacacg aatccccgca gttggtcctg gccctgccag tccgtcagga ggaaacctgc 360 cgatacccaa catgcctcca tgggccaagt ggctggtcgG cgccgccata gtcgcgatac 420 caatctacag gaggttcaga acactagaag ataagataga gaagacggcg gaggtggcga 480 tcgaggtggt ggacacggtg gcggggtcgg cggagaaggt ggcggcgagg tcgccggcgc 540 gttccccggc aacgagagcc tcagggaggc ggcgtcgagg atcaaggcgg tcacggatga 600 gatcgaggag gacgccgaga gagccgaggc cctgatcgag aaggttgacg agataaagga 660 acaagttgat tcaatcgtcg atcccttaat cgacaaggtt gtcaaggata aagaaaccta 720 gagagaagga accaaggagg aggcaatgac atgatgtaga ttattgaagg tataaagatt 780 ggttaggcgg tgccgcggtg gtaaccggaa gaaaatacct accgcatgta aaaaaaatca 840 ctaaatataa atataagaag cttttcagaa aaaaaactct tctctaacag ttatgtaaga 900 caagttctta aatttacaaa cttcttct
- (2) INFORMATION FOR SEQ ID NO:3794:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 174 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..174
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578256
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3794:

 Met Ala Ala Pro Ala Ser Ser Val Thr Ser Arg Gly Leu Ala Leu Arg

 1 5 10 15

 Ser Ser Thr Ser Val Gly Phe His Arg His Arg Gly Asn Asn Pro Val

20 25 30

Ile Ser Pro Ala Ser Ser Arg Arg Arg Ser Leu Thr Gly Gly Ser

35 40 45
Thr Met Asn Ser Ser Gly Met Asn Gly Ala Phe Pro Pro Ile Lys Gly

50 55 60
Ser Thr Arg Ile Pro Ala Val Gly Pro Gly Pro Ala Ser Pro Ser Gly
65 70 75 80

Gly Asn Leu Pro Ile Pro Asn Met Pro Pro Trp Ala Lys Trp Leu Val 85 90 95

Gly Ala Ala Ile Val Ala Ile Pro Ile Tyr Arg Arg Phe Arg Thr Leu 100 105 110

Glu Asp Lys Ile Glu Lys Thr Ala Glu Val Ala Ile Glu Val Val Asp 115 120 125

Thr Val Ala Gly Ser Ala Glu Lys Val Ala Ala Arg Ser Pro Ala Arg 130 135 140

Ser Pro Ala Thr Arg Ala Ser Gly Arg Arg Arg Arg Gly Ser Arg Arg 145 150 155 160

Ser Arg Met Arg Ser Arg Arg Thr Pro Arg Glu Pro Arg Pro 165 170

- (2) INFORMATION FOR SEQ ID NO:3795:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..125
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578257
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3795:

Met Asn Ser Ser Gly Met Asn Gly Ala Phe Pro Pro Ile Lys Gly Ser 1 5 10 15

Thr Arg Ile Pro Ala Val Gly Pro Gly Pro Ala Ser Pro Ser Gly Gly 20 25 30

Asn Leu Pro Ile Pro Asn Met Pro Pro Trp Ala Lys Trp Leu Val Gly 35 40

Ala Ala Ile Val Ala Ile Pro Ile Tyr Arg Arg Phe Arg Thr Leu Glu
50 55 60

Asp Lys Ile Glu Lys Thr Ala Glu Val Ala Ile Glu Val Val Asp Thr 65 70 75 80

Val Ala Gly Ser Ala Glu Lys Val Ala Ala Arg Ser Pro Ala Arg Ser 85 90 95

Pro Ala Thr Arg Ala Ser Gly Arg Arg Arg Arg Gly Ser Arg Arg Ser 100 105 110

Arg Met Arg Ser Arg Arg Thr Pro Arg Glu Pro Arg Pro 115 120 125

- (2) INFORMATION FOR SEQ ID NO:3796:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 120 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..120
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578258
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3796:

Met Asn Gly Ala Phe Pro Pro Ile Lys Gly Ser Thr Arg Ile Pro Ala
1 5 10 15

Val Gly Pro Gly Pro Ala Ser Pro Ser Gly Gly Asn Leu Pro Ile Pro
20 25 30

Asn Met Pro Pro Trp Ala Lys Trp Leu Val Gly Ala Ala Ile Val Ala 35 40 45

Ile Pro Ile Tyr Arg Arg Phe Arg Thr Leu Glu Asp Lys Ile Glu Lys 50 55 60

Thr Ala Glu Val Ala Ile Glu Val Val Asp Thr Val Ala Gly Ser Ala

75 65 70 Glu Lys Val Ala Ala Arg Ser Pro Ala Arg Ser Pro Ala Thr Arg Ala 90 8.5 Ser Gly Arg Arg Arg Gly Ser Arg Arg Ser Arg Met Arg Ser Arg 105 100 Arg Thr Pro Arg Glu Pro Arg Pro 120 115 (2) INFORMATION FOR SEQ ID NO:3797: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 611 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..611 (D) OTHER INFORMATION: / Ceres Seq. ID 1578317 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3797: atcgcgctct agggttttga cgcgccggcg gcttgtgttc cctttaaagc ttggctgctc gtctgctcct gctgctgtct ttcttctgct cttccatcgc gccCagtgtt ttgagaagct 120 ggtcggcgct cctagatccc ttcgcctctc tcgcgttcga ggctaggtag ccgccaccat 180 gagccgctcg gggcagcctc cggatctcaa gaagtacatg gacaagaagc ttcagattaa 240 gctgaatgca aaccgtgttg ttattggcac acttcgggga ttcgaccagt tcatgaatct 300 ggtgatcgac aacactgtgg aggtcaatgg aaatgacaag acagatattg gaatggtggt 360 tatcagggga aacagtgttg tcatgatcga ggcactggag ccagttgcca agtcgcagtg 420 aatccttatt tttcagctga tatagtcgca gcatgaaaac tgatgtaaat gctatgagtg 480 aaccctgttg tacttcggac tcgtgctttt gcacagcaac ataactcggc taccagcacc 540 cctgtttcaa tggtgacttc attactgcct tggcgctaac attggcaatg catcatttcg 600 tctattgttc t (2) INFORMATION FOR SEQ ID NO:3798: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 54 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..54 (D) OTHER INFORMATION: / Ceres Seq. ID 1578318 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3798: Ser Arg Ser Arg Val Leu Thr Arg Arg Arg Leu Val Phe Pro Leu Lys 10 Leu Gly Cys Ser Ser Ala Pro Ala Ala Val Phe Leu Leu Leu Phe His 30 25 20 Arg Ala Gln Cys Phe Glu Lys Leu Val Gly Ala Pro Arg Ser Leu Arg 35 Leu Ser Arg Val Arg Gly 50 (2) INFORMATION FOR SEQ ID NO:3799: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 80 amino acids (B) TYPE: amino acid (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..80
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578319

 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3799:

 Met Ser Arg Ser Gly Gln Pro Pro Asp Leu Lys Lys Tyr Met Asp Lys

 1
 5
 10
 15

 Lys Leu Gln Ile Lys Leu Asn Ala Asn Arg Val Val Ile Gly Thr Leu
 20
 25
 30

 Arg Gly Phe Asp Gln Phe Met Asn Leu Val Ile Asp Asn Thr Val Glu
 45

 Val Asn Gly Asn Asp Lys Thr Asp Ile Gly Met Val Val Ile Arg Gly
 55
 60

 Asn Ser Val Val Met Ile Glu Ala Leu Glu Pro Val Ala Lys Ser Gln
 65

- (2) INFORMATION FOR SEQ ID NO:3800:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..67
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578320
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3800:

Met Asp Lys Lys Leu Gln Ile Lys Leu Asn Ala Asn Arg Val Val Ile 1 5 10 15

Gly Thr Leu Arg Gly Phe Asp Gln Phe Met Asn Leu Val Ile Asp Asn 20 25 30

Thr Val Glu Val Asn Gly Asn Asp Lys Thr Asp Ile Gly Met Val Val 35 40 45

Ile Arg Gly Asn Ser Val Val Met Ile Glu Ala Leu Glu Pro Val Ala 50 55 60

Lys Ser Gln

65

- (2) INFORMATION FOR SEQ ID NO:3801:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 826 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..826
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578333
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3801:

cccatcgatt ttcctctgga atcgtaacct cagaaagcca aatctcattc tccggcgctc 60 aggeceaece aagegtegae tetecegate caateggtae eteetagtte etegeeggeg 120 gtagcggcgt cgggcgaaca gcggtgactt ggcgagggcg cttggccggc gacaatcatc 180 cactaggatg gaaggtgagg cagagaccgt ggttggttct tgttctaaac catgtgggcc 240 tetggaggae tactacatte cagattacat tetgaageea gGtgeecaae aagtaettgt 300 tgatcatgcg gcaccctgcc ccgttgtagt gttcatcaac tcaagatctg gaggccaact 360 420 tggaagtagt ttaatcaaaa catatcgtga gcttctcaat gaagcacagg tttttgatct 480 ctcaaaagag gctccagata aggtattgca tcgtttatat gccaaccttg aaaggctgaa gatggaagga gacattettg cagtteaaat ttKggaggae actgaggeta attgttgeag 540 gcggtgatgg tacagctagc tggctgcttg gggtagtcag tgaccttaag ctttcccacc 600 cacctccagt ggcaactgtg cctctgggaa ccggaaataa cctccccttt tcatttggat 660 ggggaaagaa gaatccttct actgaccaag aggctgtaaa atcattcctc gggctagtaa 720 agcatgcaaa agaaattaag attgatagtt ggcacatcat tttgagaatg cgagttccag 780 aggaaggtee atgtgateet attgeteeac tagatttgee teatte

- Page 2267 Client Docket No. 80145.003 (2) INFORMATION FOR SEQ ID NO:3802: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 119 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..119 (D) OTHER INFORMATION: / Ceres Seq. ID 1578334 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3802: Met Glu Gly Glu Ala Glu Thr Val Val Gly Ser Cys Ser Lys Pro Cys 10 5 Gly Pro Leu Glu Asp Tyr Tyr Ile Pro Asp Tyr Ile Leu Lys Pro Gly 25 30 2.0 Ala Gln Gln Val Leu Val Asp His Ala Ala Pro Cys Pro Val Val Val 40 Phe Ile Asn Ser Arg Ser Gly Gly Gln Leu Gly Ser Ser Leu Ile Lys 60 55 Thr Tyr Arg Glu Leu Leu Asn Glu Ala Gln Val Phe Asp Leu Ser Lys 75 70 Glu Ala Pro Asp Lys Val Leu His Arg Leu Tyr Ala Asn Leu Glu Arg 90 85 Leu Lys Met Glu Gly Asp Ile Leu Ala Val Gln Ile Xaa Glu Asp Thr 110 105 100 Glu Ala Asn Cys Cys Arg Arg 115 (2) INFORMATION FOR SEQ ID NO:3803: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 648 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..648 (D) OTHER INFORMATION: / Ceres Seq. ID 1578335 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3803: aagcagcagc agcacagtca tccacactaa cgaacgaact cttgctccga tcacgagcta 60 gctgaggtcg acgatggcgg ctgtgctgaa cagcaggaag acggcgcagg cggtggtggc 120 cgtgctggtg gcggcggcgc tgctggcttc gtccacttcg gcggcgatca cCtgcgggca 180 ggtggggtcg tcgCtggcgc cgtgcatccc gtacgcgacg gggagggcca gcgcgctccc 240 cgcgtcgtgc tgcagcggcg tcaagagcct caacagcgcg gcgcggacca gcgcggaccg 300 ccaggcggCg tgccgctgcc tcaagagcct cgccaacagc gtcaagagcg tcaacatggg 360 caccytegee accateceeg geaagtgegg egteteegte ggatteeeca teageatgte 420 caccgactgc aacaagatca gctaagttac gacgaccaag ctaataagcc taccgaacgt 480 acacgaacgt cccgcgcgct gcacgagtga tgaagccagg ggagaaataa aataaagccg 540
 - (2) INFORMATION FOR SEQ ID NO:3804:
 - (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 123 amino acids

ctctattata tatgtatata tgtgtggcct gcagtgcgag ttgcttcg

ctgtattgcc aggagcagca tgcattattt atcgatctat atatactg tactgtagta

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..123

```
(D) OTHER INFORMATION: / Ceres Seq. ID 1578336
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3804:
Met Ala Ala Val Leu Asn Ser Arg Lys Thr Ala Gln Ala Val Val Ala
Val Leu Val Ala Ala Ala Leu Leu Ala Ser Ser Thr Ser Ala Ala Ile
                                                     30
                                25
            20
Thr Cys Gly Gln Val Gly Ser Ser Leu Ala Pro Cys Ile Pro Tyr Ala
                            40
Thr Gly Arg Ala Ser Ala Leu Pro Ala Ser Cys Cys Ser Gly Val Lys
                                            60
                        55
Ser Leu Asn Ser Ala Ala Arg Thr Ser Ala Asp Arg Gln Ala Ala Cys
                                        75
                    70
Arg Cys Leu Lys Ser Leu Ala Asn Ser Val Lys Ser Val Asn Met Gly
                                    90
                85
Thr Val Ala Thr Ile Pro Gly Lys Cys Gly Val Ser Val Gly Phe Pro
                                                    110
                                105
            100
Ile Ser Met Ser Thr Asp Cys Asn Lys Ile Ser
                            120
        115
(2) INFORMATION FOR SEQ ID NO:3805:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 676 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..676
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578352
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3805:
gacacacete ccaaaceeta caeteeegge ggeggeggeg geggegeasa geggeageag
                                                                        60
catecgaaga tggtgaagtt ceteaageee ggcaaggeeg ttatecteet eeagggeCGe
                                                                       120
ttcqccqgca ggaaggcagt tatcgggcgc gtggccctgg tgaactacgg ggaggactat
                                                                       180
ggccgtctcg ttgtcatcgt cgatgtggtc gaccagaaca gggcacttgt ggatgcccct
                                                                       240
gatatggtca ggtgccaggt gaacttcaag cggctctcac ttactgacat caagattgac
                                                                       300
atcaaacgtg tccccaagaa gacagccctg atcaaggcga tggaggaagc tgatgtgaag
                                                                       360
accaagtggg agaacagctc atggggcaag aagctgattg tccagaagag gagagcatcg
                                                                       420
ctcaatgact ttgataggtt caaagtcatg ctggcgaaga ttaagagggg cggtgctatc
                                                                       480
aggcaagagc tcgccaagct gaagaaggcg tccacggctt aaggagtctc tttccgtgaa
                                                                       540
tgtcatgtta gagtttttgg ttatgagttg gatcagcaat tcgattgagc gttgtcaaag
                                                                       600
ccagaattac caatatgttc cctgtaaacc catttcaaac tttatcaagc acgggcgtgc
                                                                        660
tcaggatact tttgcc
 (2) INFORMATION FOR SEQ ID NO:3806:
      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 173 amino acids
           (B) TYPE: amino acid
           (C) STRANDEDNESS:
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: peptide
     (ix) FEATURE:
           (A) NAME/KEY: peptide
           (B) LOCATION: 1..173
           (D) OTHER INFORMATION: / Ceres Seq. ID 1578353
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3806:
 Asp Thr Pro Pro Lys Pro Tyr Thr Pro Gly Gly Gly Gly Gly Ala
                                     10
                 5
 Xaa Arg Gln Gln His Pro Lys Met Val Lys Phe Leu Lys Pro Gly Lys
                                 2.5
 Ala Val Ile Leu Leu Gln Gly Arg Phe Ala Gly Arg Lys Ala Val Ile
                             40
 Gly Arg Val Ala Leu Val Asn Tyr Gly Glu Asp Tyr Gly Arg Leu Val
```

```
55
   50
Val Ile Val Asp Val Val Asp Gln Asn Arg Ala Leu Val Asp Ala Pro
                                    75
                  70
Asp Met Val Arg Cys Gln Val Asn Phe Lys Arg Leu Ser Leu Thr Asp
                                 90
Ile Lys Ile Asp Ile Lys Arg Val Pro Lys Lys Thr Ala Leu Ile Lys
                             105
Ala Met Glu Glu Ala Asp Val Lys Thr Lys Trp Glu Asn Ser Ser Trp
                       120
Gly Lys Lys Leu Ile Val Gln Lys Arg Arg Ala Ser Leu Asn Asp Phe
                                       140
   130 135
Asp Arg Phe Lys Val Met Leu Ala Lys Ile Lys Arg Gly Gly Ala Ile
     150 155
Arg Gln Glu Leu Ala Lys Leu Lys Lys Ala Ser Thr Ala
             165 170
(2) INFORMATION FOR SEQ ID NO:3807:
    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 150 amino acids
         (B) TYPE: amino acid
         (C) STRANDEDNESS:
         (D) TOPOLOGY: linear
   (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
         (A) NAME/KEY: peptide
         (B) LOCATION: 1..150
         (D) OTHER INFORMATION: / Ceres Seq. ID 1578354
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3807:
Met Val Lys Phe Leu Lys Pro Gly Lys Ala Val Ile Leu Leu Gln Gly
                                  10
              5
Arg Phe Ala Gly Arg Lys Ala Val Ile Gly Arg Val Ala Leu Val Asn
                              25
          20
Tyr Gly Glu Asp Tyr Gly Arg Leu Val Val Ile Val Asp Val Val Asp
                          4.0
Gln Asn Arg Ala Leu Val Asp Ala Pro Asp Met Val Arg Cys Gln Val
                      55
Asn Phe Lys Arg Leu Ser Leu Thr Asp Ile Lys Ile Asp Ile Lys Arg
                  70
Val Pro Lys Lys Thr Ala Leu Ile Lys Ala Met Glu Glu Ala Asp Val
                                 90
             85
Lys Thr Lys Trp Glu Asn Ser Ser Trp Gly Lys Lys Leu Ile Val Gln
          100 105
Lys Arg Arg Ala Ser Leu Asn Asp Phe Asp Arg Phe Lys Val Met Leu
      115 120
Ala Lys Ile Lys Arg Gly Gly Ala Ile Arg Gln Glu Leu Ala Lys Leu
    130 135
Lys Lys Ala Ser Thr Ala
                150
(2) INFORMATION FOR SEQ ID NO:3808:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 92 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: peptide
     (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..92
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578355
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3808:
 Met Val Arg Cys Gln Val Asn Phe Lys Arg Leu Ser Leu Thr Asp Ile
```

```
Lys Ile Asp Ile Lys Arg Val Pro Lys Lys Thr Ala Leu Ile Lys Ala 20 25 30
```

Met Glu Glu Ala Asp Val Lys Thr Lys Trp Glu Asn Ser Ser Trp Gly 35 40 45

Lys Lys Leu Ile Val Gln Lys Arg Arg Ala Ser Leu Asn Asp Phe Asp 50 55 60

Arg Phe Lys Val Met Leu Ala Lys Ile Lys Arg Gly Gly Ala Ile Arg 65 70 75 80

Gln Glu Leu Ala Lys Leu Lys Lys Ala Ser Thr Ala 85 90

- (2) INFORMATION FOR SEQ ID NO:3809:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 730 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..730
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578379
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3809: tagtcgctgg agatagagcc gagaacaagg gcaactgacg cggtcaccct cgcccccaac acagagagaa ggtctgctct ccaccggatg gactcccacg gcaagcccaa gcccgccggt togacgoogo cgacgoogoo gaagoogoog aagoogooga cgoogoogaa googoogaog ccgccgacgc cgacgccgcc gacgcccgag gcgaggaagg ggttcatgcg ccgcatcttc 240 cctttcctcc tagccgccaa cctctttgtc gtagcttatg tcctcgtgcg ggccaaccaa 300 360 aaggactcaq caaagaagga cccaacgact gatcctgcta ctgcaactgc tgggaagcct gctgagccag tctctatccc cagaaaggag ctcccaccaa tccctgaaga tgaccagcgc aagCtctaca aatggatgct ggaagagaag cggaagatca agccacgcaa tgctgccgag aagaagaaac tcgatgagga gaaggccctt ctaaaagagt tcatccgagc aggatccCtc 540 ccaagettet aaaagagate aagecatttg ggtetettgt gtetgatgtt cagecaagaa 600 gatgattggg cctgattgga ttgtgtacaa acacagtact gtgctatctt gtaaactgat 660 qtctccatga tgtagcctcc tcgagttcaa aggttgtgtg gatgcaaact agtgttgtgt 720 gcattggttc
- (2) INFORMATION FOR SEQ ID NO:3810:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 154 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..154
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578380
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3810:

20 25 30 Start Dro. The Dro. The Dro. Clu Ala Arg Lys Gly Phe Met Arg

Pro Thr Pro Thr Pro Pro Thr Pro Glu Ala Arg Lys Gly Phe Met Arg
35 40 45

Arg Ile Phe Pro Phe Leu Leu Ala Ala Asn Leu Phe Val Val Ala Tyr 50 55 60

Val Leu Val Arg Ala Asn Gln Lys Asp Ser Ala Lys Lys Asp Pro Thr

65 70 75 80
Thr Asp Pro Ala Thr Ala Thr Ala Gly Lys Pro Ala Glu Pro Val Ser

85 90 95

Ile Pro Arg Lys Glu Leu Pro Pro Ile Pro Glu Asp Asp Gln Arg Lys
100 105 110

```
Leu Tyr Lys Trp Met Leu Glu Glu Lys Arg Lys Ile Lys Pro Arg Asn
                            120
                                                125
Ala Ala Glu Lys Lys Lys Leu Asp Glu Glu Lys Ala Leu Leu Lys Glu
                       135
Phe Ile Arg Ala Gly Ser Leu Pro Ser Phe
                    150
(2) INFORMATION FOR SEQ ID NO:3811:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 108 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..108
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578381
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3811:
Met Arg Arg Ile Phe Pro Phe Leu Leu Ala Ala Asn Leu Phe Val Val
                                    10
Ala Tyr Val Leu Val Arg Ala Asn Gln Lys Asp Ser Ala Lys Lys Asp
            20
                                25
                                                     30
Pro Thr Thr Asp Pro Ala Thr Ala Thr Ala Gly Lys Pro Ala Glu Pro
                            4.0
Val Ser Ile Pro Arg Lys Glu Leu Pro Pro Ile Pro Glu Asp Asp Gln
                        55
Arg Lys Leu Tyr Lys Trp Met Leu Glu Glu Lys Arg Lys Ile Lys Pro
                    70
                                        75
Arg Asn Ala Ala Glu Lys Lys Lys Leu Asp Glu Glu Lys Ala Leu Leu
                                    90
Lys Glu Phe Ile Arg Ala Gly Ser Leu Pro Ser Phe
                                105
            100
(2) INFORMATION FOR SEQ ID NO:3812:
     (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 78 amino acids
           (B) TYPE: amino acid
           (C) STRANDEDNESS:
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: peptide
     (ix) FEATURE:
           (A) NAME/KEY: peptide
           (B) LOCATION: 1..78
           (D) OTHER INFORMATION: / Ceres Seq. ID 1578382
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3812:
Met Ser Ser Cys Gly Pro Thr Lys Arg Thr Gln Gln Arg Arg Thr Gln
                                     10
             5
Arg Leu Ile Leu Leu Gln Leu Leu Gly Ser Leu Leu Ser Gln Ser
                                 25
            2.0
Leu Ser Pro Glu Arg Ser Ser His Gln Ser Leu Lys Met Thr Ser Ala
                             40
                                                 45
 Ser Ser Thr Asn Gly Cys Trp Lys Arg Ser Gly Arg Ser Ser His Ala
                        55
Met Leu Pro Arg Arg Arg Asn Ser Met Arg Arg Pro Phe
                     70
                                         75
 (2) INFORMATION FOR SEQ ID NO:3813:
      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 831 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: single
```

(ii) MOLECULE TYPE: DNA (genomic)

(ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..831
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578386
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3813: aaacttgtca agcttttcca agaaacctag ctagctagct agtaagaggc acaggccggc 60 accatgtege accaccatte ceaccacaaa teteattete acaacegtae ceaccaceae 120 tctcactctc actccggang agntggaggc ggcggcggcg gtggcggtgc cggtggaggc 180 ggaggcggag tggctaaatg ccactgtgat tgctcacacc atgatcattc accgccaagg 240 caaccgttct tcccgccacc gcagcttcca ccaccacaaa tctttcttcc tgcaggacca 300 ccgctccctc cgcctgggcc gctcccattt ccgccaccga tattcttcgg acctccgccg 360 420 cogccaccc cgcccccgcc accgttcatg tgcccacgac cgccaccatg catgtaccgg agGtggtaat ggagataaaa gttgatatac acggtgtgca tgtgtttgtg ccaaagcttc 480 tcgtacgtgg tgttcgagtt tctgtcaccc caaataagaa ccgagctctt ctccggatag 540 aactatette acagggttee etgtteaagt taggatggea egeateatea tateteggaa ggaagccctc ggggagtctt ctccatgtat gggtggagtt ttgaaagaag tcattatatt 660 attgctagtt cttgttccct actagatgtt ctcgttgatg cgtggatttt atacgtgtac 720 ttgttctctt gtgctttcca ccggccctga tgtcgtcccg ttgtaaccga tgttcgtttg tgtttcaatg tgtctttggt ttaatgatat gttgtgtgtc tgctttcctt c
- (2) INFORMATION FOR SEQ ID NO:3814:
 - (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 121 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..121
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578387
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3814: Met Ser His His Ser His His Lys Ser His Ser His Asn Arg Thr

Gly Gly Gly Gly Gly Gly Gly Gly Val Ala Lys Cys His Cys 35 40 45

Asp Cys Ser His His Asp His Ser Pro Pro Arg Gln Pro Phe Phe Pro 50 55 60

Pro Pro Gln Leu Pro Pro Pro Gln Ile Phe Leu Pro Ala Gly Pro Pro 65 70 75 80

Leu Pro Pro Pro Gly Pro Leu Pro Phe Pro Pro Pro Ile Phe Phe Gly 85 90 95

Pro Pro Pro Cys Met Tyr Arg Arg Trp 115 120

- (2) INFORMATION FOR SEQ ID NO:3815:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 74 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..74
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578388
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3815:

Met Ile Ile His Arg Gln Gly Asn Arg Ser Ser Arg His Arg Ser Phe

1 5 10 15

```
Client Docket No. 80145.003
His His Lys Ser Phe Phe Leu Gln Asp His Arg Ser Leu Arg Leu
                                25
Gly Arg Ser His Phe Arg His Arg Tyr Ser Ser Asp Leu Arg Arg
                            40
        35
His Pro Arg Pro Arg His Arg Ser Cys Ala His Asp Arg His His Ala
                        55
Cys Thr Gly Gly Gly Asn Gly Asp Lys Ser
                    70
(2) INFORMATION FOR SEQ ID NO:3816:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 78 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..78
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578389
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3816:
Met His Val Pro Glu Val Val Met Glu Ile Lys Val Asp Ile His Gly
                                    10
                5
Val His Val Phe Val Pro Lys Leu Leu Val Arg Gly Val Arg Val Ser
                                25
            20
Val Thr Pro Asn Lys Asn Arg Ala Leu Leu Arg Ile Glu Leu Ser Ser
                            40
                                                 4.5
Gln Gly Ser Leu Phe Lys Leu Gly Trp His Ala Ser Ser Tyr Leu Gly
                        55
Arg Lys Pro Ser Gly Ser Leu Leu His Val Trp Val Glu Phe
                    70
(2) INFORMATION FOR SEQ ID NO:3817:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 750 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
     (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..750
           (D) OTHER INFORMATION: / Ceres Seq. ID 1578394
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3817:
                                                                        60
atctcttctt tecectetee etecectege egtegetgte gtegeegtee gtgetageea
tggatctagg cgctcccgct cgacggcgct taccgatccg cctcttgAct ggtgtcgctc
                                                                        120
gccgtcctca tggtcctcac cgcgcgttcc agtgccgaag tcatcaccct caccgaagag
                                                                        180
                                                                        240
accttctccg acaagataaa ggagaaggac acggtgtggt ttgtgcagtt ctgcgtcccc
                                                                        300
tggtgtaaac actgcaagaa ccttggaaca ctatgggagg acctgggaaa ggttatggaa
ggtgcggatg aaattgagat tgggcaagtt gactgtggtg tcagcaaacc agtatgctca
                                                                        360
aaggtcgata tacactccta cccaacattc aaggtgtttt atgaaggcga agaagtagta
                                                                        420
aaatataaag gacctaggaa tgtggaatcg ctgaagaact tcgtgttgaa tgaagctgag
                                                                        480
aaagcaggtg aggcaaagct tcaagctgat tgaggcaggg gagtttcagc aagcatgtgg
                                                                        540
cgtagacaag gaacaatgct gtgcAacatt gtcttctatc ctgtcattta caaagccaat
                                                                        600
 ttacaggaaa gaaatgatct tatgaccccg tatcagagta ttcctcttcg aaagtaactc
                                                                        660
                                                                        720
 cgaatcagtt catagaagct gtactccatt ccatagtttt tatcacattg acaaactccg
 aatcagttaa tagaagctgt actccattcg
 (2) INFORMATION FOR SEQ ID NO:3818:
```

- - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 81 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..81
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578395
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3818:
- Leu Phe Phe Pro Leu Ser Leu Pro Ser Pro Ser Leu Ser Ser Pro Ser 1 5 10 15
- Val Leu Ala Met Asp Leu Gly Ala Pro Ala Arg Arg Arg Leu Pro Ile 20 25 30
- Arg Leu Leu Thr Gly Val Ala Arg Arg Pro His Gly Pro His Arg Ala 35 40 45
- Phe Gln Cys Arg Ser His His Pro His Arg Arg Asp Leu Leu Arg Gln 50 55 60
- Asp Lys Gly Glu Gly His Gly Val Val Cys Ala Val Leu Arg Pro Leu 65 70 75 80
- (2) INFORMATION FOR SEQ ID NO:3819:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 127 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..127
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578396
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3819:
- Met Val Leu Thr Ala Arg Ser Ser Ala Glu Val Ile Thr Leu Thr Glu 1 5 10 15
- Glu Thr Phe Ser Asp Lys Ile Lys Glu Lys Asp Thr Val Trp Phe Val 20 25 30
- Gln Phe Cys Val Pro Trp Cys Lys His Cys Lys Asn Leu Gly Thr Leu 35 40
- Trp Glu Asp Leu Gly Lys Val Met Glu Gly Ala Asp Glu Ile Glu Ile
 50 55 60
- Gly Gln Val Asp Cys Gly Val Ser Lys Pro Val Cys Ser Lys Val Asp 65 70 75 80
- Ile His Ser TyrPro Thr Phe Lys Val Phe Tyr Glu Gly Glu Glu Val8590Val Lys Tyr Lys Gly Pro Arg Asn Val Glu Ser Leu Lys Asn Phe Val
- 100 105 100 Ale Clu Ale Clu Ale Clu Clu Ale Lve Leu Clu Ale Asp
- Leu Asn Glu Ala Glu Lys Ala Gly Glu Ala Lys Leu Gln Ala Asp 115 120 125
- (2) INFORMATION FOR SEQ ID NO:3820:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 72 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..72
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578397
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3820:
- Met Glu Gly Ala Asp Glu Ile Glu Ile Gly Gln Val Asp Cys Gly Val 1 Ser Lys Pro Val Cys Ser Lys Val Asp Ile His Ser Tyr Pro Thr Phe

```
25
                                                    30
            20
Lys Val Phe Tyr Glu Gly Glu Glu Val Val Lys Tyr Lys Gly Pro Arg
                                               45
                           40
Asn Val Glu Ser Leu Lys Asn Phe Val Leu Asn Glu Ala Glu Lys Ala
                        55
Gly Glu Ala Lys Leu Gln Ala Asp
             70
(2) INFORMATION FOR SEQ ID NO:3821:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 689 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..689
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578416
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3821:
gagaagegta eceggeaget ecgeteegte agteegteeg eececaagaa tgteagaega
ggccaggcgc gggcccgcgg gcgccgcgca ggtggtgctt cgggcctcct ccgaggaccg
                                                                       120
caageeggtg ggeteggggt eteegeegee ggeagegaee gegaetgegG ttgegeaeaa
                                                                       180
gatccagctc aagagtgccg acatgaagga ggagatgcgg caggaggcct tcgaaattgc
                                                                       240
tcgcatcgca ttcgagaagc acagtatgga gaaggacatc gcggagtaca taaagaagga
                                                                       300
gttcgacaag aaccacggcc caacctggca ctgcatcgtc ggccgcaact tcggttccta
                                                                       360
cgtgacgcac gagacaaact actttgtata tttctacatc gactctaaag ctgtcttgct
                                                                       420
attcaagtct gggtgattgt cgcagccaac agtcaacctt gcatgcctac atcttctttc
                                                                       480
tctcgtgtat gctccatccc ctcccctttc ccctcagagt cgtctgcagc caagcctgga
                                                                       540
                                                                       600
agcoggtaat cttatgagcc tgcatgttga tgtatcagca acggattatt cttcgcatgc
catagtgtga gatcaggttg catcttattt atgtctgata tatcttggtg ttgtgagtac
                                                                       660
attatcttqt tqcattatqa ttqccqgac
(2) INFORMATION FOR SEQ ID NO:3822:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 135 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..135
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578417
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3822:
Glu Lys Arg Thr Arg Gln Leu Arg Ser Val Ser Pro Ser Ala Pro Lys
                                     10
                5
Asn Val Arg Arg Gly Gln Ala Arg Ala Arg Gly Arg Arg Ala Gly Gly
                                 25
            20
Ala Ser Gly Leu Leu Arg Gly Pro Gln Ala Gly Gly Leu Gly Val Ser
                             40
Ala Ala Gly Ser Asp Arg Asp Cys Gly Cys Ala Gln Asp Pro Ala Gln
                         55
Glu Cys Arg His Glu Gly Gly Asp Ala Ala Gly Gly Leu Arg Asn Cys
                                         75
                     70
Ser His Arg Ile Arg Glu Ala Gln Tyr Gly Glu Gly His Arg Gly Val
                                     90
                85
His Lys Glu Gly Val Arg Gln Glu Pro Arg Pro Asn Leu Ala Leu His
                                 105
             100
Arg Arg Pro Gln Leu Arg Phe Leu Arg Asp Ala Arg Asp Lys Leu Leu
                             120
 Cys Ile Phe Leu His Arg Leu
```

- (2) INFORMATION FOR SEQ ID NO:3823:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 144 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..144
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578418
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3823:

Arg Ser Val Pro Gly Ser Ser Ala Pro Ser Val Arg Pro Pro Pro Arg 1 5 10 15

Met Ser Asp Glu Ala Arg Arg Gly Pro Ala Gly Ala Ala Gln Val Val 20 25 30

Leu Arg Ala Ser Ser Glu Asp Arg Lys Pro Val Gly Ser Gly Ser Pro 35 40 45

Pro Pro Ala Ala Thr Ala Thr Ala Val Ala His Lys Ile Gln Leu Lys 50 55 60

Ser Ala Asp Met Lys Glu Glu Met Arg Gln Glu Ala Phe Glu Ile Ala 70 75 80

Arg Ile Ala Phe Glu Lys His Ser Met Glu Lys Asp Ile Ala Glu Tyr
85 90 95

Ile Lys Lys Glu Phe Asp Lys Asn His Gly Pro Thr Trp His Cys Ile 100 105 110

Val Gly Arg Asn Phe Gly Ser Tyr Val Thr His Glu Thr Asn Tyr Phe 115 120 125

Val Tyr Phe Tyr Ile Asp Ser Lys Ala Val Leu Leu Phe Lys Ser Gly 130 135 140

- (2) INFORMATION FOR SEQ ID NO:3824:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..128
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578419
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3824:

Met Ser Asp Glu Ala Arg Arg Gly Pro Ala Gly Ala Ala Gln Val Val

Leu Arg Ala Ser Ser Glu Asp Arg Lys Pro Val Gly Ser Gly Ser Pro
20 25 30

Pro Pro Ala Ala Thr Ala Thr Ala Val Ala His Lys Ile Gln Leu Lys
35 40 45

Ser Ala Asp Met Lys Glu Glu Met Arg Gln Glu Ala Phe Glu Ile Ala 50 55 60

Arg Ile Ala Phe Glu Lys His Ser Met Glu Lys Asp Ile Ala Glu Tyr
65 70 75 80

Ile Lys Lys Glu Phe Asp Lys Asn His Gly Pro Thr Trp His Cys Ile
85 90 95

Val Gly Arg Asn Phe Gly Ser Tyr Val Thr His Glu Thr Asn Tyr Phe
100 105 110

Val Tyr Phe Tyr Ile Asp Ser Lys Ala Val Leu Leu Phe Lys Ser Gly
115 120 125

- (2) INFORMATION FOR SEQ ID NO:3825:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 855 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..855
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578422
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3825:

aactcactcg tccccttcca gttccgcttc cgatctgcgc ttcgatctcc ctcttcgcag 60 aggtgcttgt gagcatgtat ctgctaggca acaaaagtgg aaagaagaaa gtgtatgtcg 120 attatatgaa tgtccctcta ccgtatgcca tcgaagagaa ttacggtggg cgcttctttg 180 acgacgacga cgatcttgcc caagttcttc aagatcagga aatattgtat catttaattc 240 aaggaagtaa tggtggtgga ggtttctacc tcaaagactg gtaagcatgg ccatgccaaa 300 tgccactttg ttgccataga catattcaac gggaaaaagc ttgaagatat tgttccttca 360 tcacacaact gtgatattcc gcatgtgaac cgtactgagt accagctgat tgatatatca 420 gaggatggat ttgtgagcct tcttacttca gatggcaaca ctaaggatga tcttagactc 480 540 ccaactgatg agactcttgt ggcccagatc aaggaagggt ttgaaagcgg caaggatctt Ggttgtgact gtccagtctg ctatggggga ggagcagatc tgcgcgctga aggatgttgg ccccaagtaa cttacctgcc ttggaatact gtatctcaaa acctaaatcg aaaaaagaag tgtatcaagg attgctacag agacatccat ctggcttgag ctggcttttg ctatggcaaa cacaagtgca gggatcgctg ggtgttgcac cgtgtctgca ttatctgtgg ttacattctg gaccetgtat tttctatggt tttatgcccc ctactgttta gtattaatta tcaataaatt 840 tgtttgggac ggttg

- (2) INFORMATION FOR SEQ ID NO:3826:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 93 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..93
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578423
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3826:

Leu Thr Arg Pro Leu Pro Val Pro Leu Pro Ile Cys Ala Ser Ile Ser 1 5 10 15

Leu Phe Ala Glu Val Leu Val Ser Met Tyr Leu Leu Gly Asn Lys Ser 20 25 30

Gly Lys Lys Lys Val Tyr Val Asp Tyr Met Asn Val Pro Leu Pro Tyr 35 40 45

Ala Ile Glu Glu Asn Tyr Gly Gly Arg Phe Phe Asp Asp Asp Asp Asp 50 55 60

Leu Ala Gln Val Leu Gln Asp Gln Glu Ile Leu Tyr His Leu Ile Gln 65 70 75 80

- Gly Ser Asn Gly Gly Gly Gly Phe Tyr Leu Lys Asp Trp 85 90
- (2) INFORMATION FOR SEQ ID NO:3827:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 149 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..149
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578424
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3827:

Met Val Val Glu Val Ser Thr Ser Lys Thr Gly Lys His Gly His Ala 10

Lys Cys His Phe Val Ala Ile Asp Ile Phe Asn Gly Lys Lys Leu Glu 25 20

Asp Ile Val Pro Ser Ser His Asn Cys Asp Ile Pro His Val Asn Arg 40

Thr Glu Tyr Gln Leu Ile Asp Ile Ser Glu Asp Gly Phe Val Ser Leu 55

Leu Thr Ser Asp Gly Asn Thr Lys Asp Asp Leu Arg Leu Pro Thr Asp 70 75

Glu Thr Leu Val Ala Gln Ile Lys Glu Gly Phe Glu Ser Gly Lys Asp 90

Leu Gly Cys Asp Cys Pro Val Cys Tyr Gly Gly Gly Ala Asp Leu Arg 100 105

Ala Glu Gly Cys Trp Pro Gln Val Thr Tyr Leu Pro Trp Asn Thr Val 120 125 115

Ser Gln Asn Leu Asn Arg Lys Lys Lys Cys Ile Lys Asp Cys Tyr Arg 140 135 130

Asp Ile His Leu Ala 145

- (2) INFORMATION FOR SEQ ID NO:3828:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 75 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..75
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578425
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3828:

Met Leu Ala Pro Ser Asn Leu Pro Ala Leu Glu Tyr Cys Ile Ser Lys 10 5

Pro Lys Ser Lys Lys Glu Val Tyr Gln Gly Leu Leu Gln Arg His Pro 25 20

Ser Gly Leu Ser Trp Leu Leu Leu Trp Gln Thr Gln Val Gln Gly Ser 40

Leu Gly Val Ala Pro Cys Leu His Tyr Leu Trp Leu His Ser Gly Pro 55

Cys Ile Phe Tyr Gly Phe Met Pro Pro Thr Val 70

- (2) INFORMATION FOR SEQ ID NO:3829:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 670 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..670
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578443
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3829:

aaccggagaa caacgcactt gtgttgcgta cgtcggtcac atgcattgca tctgcatccg gagtagegag ttctagacac ageaggeaac agactgargt ageecagega gegagegage aatggcaacc ctcagcgccg ccccctcgt cgGcgcggcc gccgtcgcca ggccgtgtca ggctcaaggt ttgccgcagc tgagggtgag agccgagaag gcgaggtgcg gcgccgccca

120

180

ctcgaggcgg ccgagccagc ggcgggacgg caacaacggc gcatcgtcgt cgcttctggc 300 cgtrgccacc agcgggtga ccacgtcgc cgsvctggcg ctggtggacg agcggatgtc 360 gacggaggc accgggctca gcctggggct cagcaacaac ctgctgggt ggatcctgct ggcctcatct ggtccctcta caccgtctac acctccacgc tcgacgagga 480 cgacgactcc ggcctctcgc tctgaactca tccgtcgatt attcctagct actgtattt ttgttcagcc tgaccgtga gttcgatcga tctatgcatg cgttggtgca gacgaagctt 600 aagaccgtgg ttgtatgca ccgtaattca gttgttgcat ctcagatggt aatgataatg 660 acgagtacgc

- (2) INFORMATION FOR SEQ ID NO:3830:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 66 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..66
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578444
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3830:

Pro Glu Asn Asn Ala Leu Val Leu Arg Thr Ser Val Thr Cys Ile Ala

Ser Ala Ser Gly Val Ala Ser Ser Arg His Ser Arg Gln Gln Thr Xaa 20 25 30

Val Ala Gln Arg Ala Ser Glu Gln Trp Gln Pro Ser Ala Pro Pro Pro 35 40 45

Ser Ser Ala Arg Pro Pro Ser Pro Gly Arg Val Arg Leu Lys Val Cys 50 55 60

Arg Ser

65

- (2) INFORMATION FOR SEQ ID NO:3831:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 127 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..127
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578445
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3831:

Met Ala Thr Leu Ser Ala Ala Pro Leu Val Gly Ala Ala Ala Val Ala 1 5 10 15

Arg Pro Cys Gln Ala Gln Gly Leu Pro Gln Leu Arg Val Arg Ala Glu 20 25 30

Lys Ala Arg Cys Gly Ala Ala His Ser Arg Arg Pro Ser Gln Arg Arg 35 40 45

Asp Gly Asn Asn Gly Ala Ser Ser Ser Leu Leu Ala Xaa Ala Thr Ser 50 55 60

Ala Val Thr Thr Ser Pro Xaa Leu Ala Leu Val Asp Glu Arg Met Ser 65 70 75 80

Thr Glu Gly Thr Gly Leu Ser Leu Gly Leu Ser Asn Asn Leu Leu Gly

85

90

95

Trp Ile Leu Leu Gly Val Phe Gly Leu Ile Trp Ser Leu Tyr Thr Val

Tyr Thr Ser Thr Leu Asp Glu Asp Asp Asp Ser Gly Leu Ser Leu 115 120 125

- (2) INFORMATION FOR SEQ ID NO:3832:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1027 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1027
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578448
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3832:

(XI) DECOUNCE DESCRIPTION: DEC ID NOTES OF									
	ctcaataaaa	tatgtactcg	gaatcggaag	aagctgcctt	ccttttccat	ccgcggaacg	60		
	acqcacqcqq	acgcctcctt	gttccgggtc	ctactcccgc	cgcctagagg	cctcgccctc	120		
	cccctccqq	cgaaaaccga	ttctctccgg	cgtttcctgg	tcccttagtg	caagcaagga	180		
	caccactcct	ctagcgagct	ccgttctgaa	gcggcaagaa	agatgattaa	tcttttcaaa	240		
	ataaaqqqtc	aaaagaaaga	ggaggcagca	agtctgctgg	aaaggcccct	gttaagaaac	300		
	agtetactag	ggagctccgt	cttcataaag	atattagtga	gctcaacctg	ccgaagacca	360		
	catcaatttc	ttttcccaat	ggcaaggatg	atctgatgaa	ttttgagacc	accatccgac	420		
	ctgatgaagg	atattacatg	ggaggcactt	tcgttttcac	ctttcaagtg	tccccatctt	480		
	atcctcatga	tcctccgaag	Gtcaaatgca	agaccaagGt	gtaccatcca	aatattgatc	540		
	tagaagggaa	tgtatgtctg	aacattctqc	gcgaagattg	gaagcctgtt	ctcaacatca	600		
	acactottat	ttatggcctg	aatcttcttt	ttacgcaacc	aaacgacgag	gatcctctga	660		
	accacdaadc	tgcagttgtc	cttcgtgaca	atccaaagat	gtttgaggca	aatgtgagaa	720		
	gaggaage	tggaggctac	atcaaccaac	actatttcca	aagatgtgct	tgacttgatg	780		
	+ aataataac	ttgaaaacga	tcaacagage	ccctccccct	gtatcagcac	cagcgcgccc	840		
	aggtttgtggc	gcggaaagta	cttctccaac	caaaatccaa	accottcato	gtgtgatact	900		
	agettegege	tgtttgcccg	cctttataat	atataatata	ataataatac	ataatgacat	960		
	grgargeare	ctctaactgt	atcattcatt	ccataaatcc	taaacgagga	ataggaagta	1020		
		didiaddigt	accactcatt	CCacaaaccc	caaaogagga				
	gattgtt								

- (2) INFORMATION FOR SEQ ID NO:3833:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 74 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..74
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578449
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3833:

Ser Ala Glu Arg Arg Thr Arg Thr Pro Pro Cys Ser Gly Ser Tyr Ser 20 25 30

Arg Arg Leu Glu Ala Ser Pro Ser Pro Leu Arg Arg Lys Pro Ile Leu 35 40 45

Ser Gly Val Ser Trp Ser Leu Ser Ala Ser Lys Asp Thr Ala Pro Leu 50 55 60

Ala Ser Ser Val Leu Lys Arg Gln Glu Arg

- (2) INFORMATION FOR SEQ ID NO:3834:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..125
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578450
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3834:

```
Met Asn Phe Glu Thr Thr Ile Arg Pro Asp Glu Gly Tyr Tyr Met Gly
                                   10
Gly Thr Phe Val Phe Thr Phe Gln Val Ser Pro Ser Tyr Pro His Asp
           20
                               25
Pro Pro Lys Val Lys Cys Lys Thr Lys Val Tyr His Pro Asn Ile Asp
                           40
Leu Glu Gly Asn Val Cys Leu Asn Ile Leu Arg Glu Asp Trp Lys Pro
                                           60
                       55
Val Leu Asn Ile Asn Thr Val Ile Tyr Gly Leu Asn Leu Leu Phe Thr
                                       75
                    70
Gln Pro Asn Asp Glu Asp Pro Leu Asn His Glu Ala Ala Val Val Leu
               85
                                   90
Arg Asp Asn Pro Lys Met Phe Glu Ala Asn Val Arg Arg Ala Met Ala
                               105
                                                    110
           100
Gly Gly Tyr Val Gly Gln His Tyr Phe Gln Arg Cys Ala
                           120
        115
(2) INFORMATION FOR SEQ ID NO:3835:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 111 amino acids
          (B) TYPE: amino acid
```

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..111
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578451
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3835: Met Gly Gly Thr Phe Val Phe Thr Phe Gln Val Ser Pro Ser Tyr Pro 10 5 His Asp Pro Pro Lys Val Lys Cys Lys Thr Lys Val Tyr His Pro Asn 25 Ile Asp Leu Glu Gly Asn Val Cys Leu Asn Ile Leu Arg Glu Asp Trp 40 Lys Pro Val Leu Asn Ile Asn Thr Val Ile Tyr Gly Leu Asn Leu Leu 55 Phe Thr Gln Pro Asn Asp Glu Asp Pro Leu Asn His Glu Ala Ala Val 75 70 Val Leu Arg Asp Asn Pro Lys Met Phe Glu Ala Asn Val Arg Arg Ala 90 8.5 Met Ala Gly Gly Tyr Val Gly Gln His Tyr Phe Gln Arg Cys Ala
- (2) INFORMATION FOR SEQ ID NO:3836:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 847 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..847
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578452

105

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3836:

argccatgge tegacgeege cettgagtee tgeececaag atgacgatga teeceetege 60
cggetteace geectatetg eegeeggeet eetgeteate tteteeteet teetgetgea 120
aactcaagga ggagecagaa geagegagga ggageggtae gtgeeggtge geagggtggt 180
gtaceggtee atgacacegg ergeggegag tgergegaeg aeggeagagg eageggeage 240
gneggeateg taegageegt tegaggtgt egaggggtge eggtgetgeg egeegtegte 300
gtegtegtee aaeggeagea geagetgegt ggaeaegage tgetgCtaeg eeategaetg 360
cgaeeteece ggeaageeCt teggeaeetg egeetteaee eegeaaaeet geggetgegg 420

- (2) INFORMATION FOR SEQ ID NO:3837:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..175
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578453
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3837:

Xaa Pro Trp Leu Asp Ala Ala Leu Glu Ser Cys Pro Gln Asp Asp Asp 1 5 10 15

Asp Pro Pro Arg Arg Leu His Arg Pro Ile Cys Arg Arg Pro Pro Ala 20 25 30

His Leu Leu Leu Pro Ala Ala Asn Ser Arg Arg Ser Gln Lys Gln 35 40 45

Arg Gly Gly Ala Val Arg Ala Gly Ala Gln Gly Gly Val Pro Val His 50 55 60

Asp Thr Gly Xaa Gly Glu Cys Xaa Asp Asp Gly Arg Gly Ser Gly Ser 65 70 75 80

Xaa Gly Ile Val Arg Ala Val Arg Gly Val Arg Gly Val Pro Val Leu 85 90 95

Arg Ala Val Val Val Val Gln Arg Gln Gln Gln Leu Arg Gly His

100
105
110
Gl Jan Arg Bro Bro Arg Gln Ala Leu Arg

Glu Leu Leu Arg His Arg Leu Arg Pro Pro Arg Gln Ala Leu Arg
115 120 125

His Leu Arg Leu His Pro Ala Asn Leu Arg Leu Arg Arg Arg Gln Gln
130
135
140

Gln Leu His Pro Pro Arg Pro Asp Asp Asp Ser Ser Phe Leu Gln Leu 145 150 155 160

- Gly Tyr Phe Phe Trp Ile Ile His Arg Leu Thr Leu Arg Tyr Asp $165 \\ 170 \\ 175$
- (2) INFORMATION FOR SEQ ID NO:3838:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 180 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..180
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578454

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3838:

Xaa His Gly Ser Thr Pro Pro Leu Ser Pro Ala Pro Lys Met Thr Met

1 5 10 15

Ile Pro Leu Ala Gly Phe Thr Ala Leu Ser Ala Ala Gly Leu Leu Leu 20 25 30

```
50
Thr Pro Xaa Ala Ala Ser Xaa Ala Thr Thr Ala Glu Ala Ala Ala Ala
                70
                                  75
Xaa Ala Ser Tyr Glu Pro Phe Glu Val Cys Glu Gly Cys Arg Cys Cys
                              90
Ala Pro Ser Ser Ser Ser Asn Gly Ser Ser Ser Cys Val Asp Thr
                          105
          100
Ser Cys Cys Tyr Ala Ile Asp Cys Asp Leu Pro Gly Lys Pro Phe Gly
                       120
Thr Cys Ala Phe Thr Pro Gln Thr Cys Gly Cys Gly Gly Ala Ser Ser
                                   140
 130 135
Asn Cys Thr Pro Leu Val Leu Met Met Thr Pro Leu Ser Cys Asn Leu
    150
                                 155 160
Ala Thr Ser Ser Gly Ser Ser Ile Val Leu Arg Tyr Val Thr Ile Arg
          165
                         170
```

Ser Gln Ile Arg 180

- (2) INFORMATION FOR SEQ ID NO:3839:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 167 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..167
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578455
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3839:

Met Thr Met Ile Pro Leu Ala Gly Phe Thr Ala Leu Ser Ala Ala Gly 1 5 10

Leu Leu Ile Phe Ser Ser Phe Leu Leu Gln Thr Gln Gly Gly Ala 20 25 30

Arg Ser Ser Glu Glu Glu Arg Tyr Val Pro Val Arg Arg Val Val Tyr 35 40 45

Arg Ser Met Thr Pro Xaa Ala Ala Ser Xaa Ala Thr Thr Ala Glu Ala 50 60

Ala Ala Ala Xaa Ala Ser Tyr Glu Pro Phe Glu Val Cys Glu Gly Cys 65 70 75 80

Arg Cys Cys Ala Pro Ser Ser Ser Ser Ser Asn Gly Ser Ser Ser Cys 85 90 95

Val Asp Thr Ser Cys Cys Tyr Ala Ile Asp Cys Asp Leu Pro Gly Lys
100 105 110

Pro Phe Gly Thr Cys Ala Phe Thr Pro Gln Thr Cys Gly Cys Gly Gly 115 120 125

Ala Ser Ser Asn Cys Thr Pro Leu Val Leu Met Met Thr Pro Leu Ser 130 135 140

Cys Asn Leu Ala Thr Ser Ser Gly Ser Ser Ile Val Leu Arg Tyr Val 145 150 155 160

Thr Ile Arg Ser Gln Ile Arg

- (2) INFORMATION FOR SEQ ID NO:3840:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 954 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..954

(D) OTHER INFORMATION: / Ceres Seq. ID 1578464

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3840:									
aaacatactc cgtttccgaa tccgttccac cattgcctat tgccccatcc tccccgctag	60								
gttttgccag catggccgcc gccgccgccc ggaggetect ctcccgccgc gcctcctcgt	120								
cetecetete egegeteete egtegeggeg etgteeegga geagtegetg gtgttgegee	180								
eggetgttgt egeggeggee tecegeeteg getteeageg egggatggeg eggeggeetg	240								
geggggaegg etaegteteg aegeggtetg gegegggegg ggaeegegeg emeatggeea	300								
cggagatggc gccgctgttc cccgggtgcg actacgagca ttggctcatc gtgatggaca	360								
agcccggcgg ggagggcgcc agCaagcagc agatgattga ctgctacatc cagaccctcg	420								
ccaaggteet tggaagegag gaggaggega agaagaagat ctacaaegte tegtgegage	480								
gctacttcgg gtttgggtgc gagatcgatg aggagacatc taacaagctc gaggggctcc	540								
ctggGtgttc tctttgtgct cccggattcg tatgttgatg ctgaatacaa ggactacgga	600								
gctgaactct tcgtcaacgg tgagattgtt cagaggaccc ccgagaggca gaggagggtg	660								
gagecegtge cacagaggge ageagacagg eegaggtaca atgacagaac eegtaegcae	720								
gcaggaggga gaaccagcga tgaactttgc gataaaatca taaaaaatac cacagcaaca	780								
agtcccaggt ggtttcagct ctggaattca aggatcaccg agtatcgcct gtattaaatt	840								
ggcaatctca ctttacgtgc agtctagagt atcgtttcta tgtgctcagc ttggacgtat	900								
tgtattctgt aattacagct acttggagat ttggaaggac ctggcttgca acgt									
(2) INFORMATION FOR SEQ ID NO:3841:									

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 132 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..132
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578465
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3841: Asn Ile Leu Arg Phe Arg Ile Arg Ser Thr Ile Ala Tyr Cys Pro Ile

1 5 10 15 Leu Pro Ala Arg Phe Cys Gln His Gly Arg Arg Arg Pro Glu Ala

20 25 30

Pro Jou Pro Pro Arg Leu Leu Val Leu Pro Leu Arg Ala Pro Pro Ser

Pro Leu Pro Pro Arg Leu Leu Val Leu Pro Leu Arg Ala Pro Pro Ser 35 40 45

Arg Arg Cys Pro Gly Ala Val Ala Gly Val Ala Pro Gly Cys Cys Arg 50 55 60 Gly Gly Leu Pro Pro Arg Leu Pro Ala Arg Asp Gly Ala Ala Ala Trp

65 70 75 80
Arg Gly Arg Leu Arg Leu Asp Ala Val Trp Arg Gly Arg Gly Pro Arg

85 90 95 Xaa His Gly His Gly Asp Gly Ala Ala Val Pro Arg Val Arg Leu Arg

100 105 110

Ala Leu Ala His Arg Asp Gly Gln Ala Arg Arg Gly Gly Arg Gln Gln

120

Ala Ala Asp Asp

115

130

- (2) INFORMATION FOR SEQ ID NO:3842:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 191 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..191
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578466
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3842:

Thr Tyr Ser Val Ser Glu Ser Val Pro Pro Leu Pro Ile Ala Pro Ser

10 Ser Pro Leu Gly Phe Ala Ser Met Ala Ala Ala Ala Ala Arg Arg Leu 25 Leu Ser Arg Arg Ala Ser Ser Ser Leu Ser Ala Leu Leu Arg Arg 40 Gly Ala Val Pro Glu Gln Ser Leu Val Leu Arg Pro Ala Val Val Ala 55 Ala Ala Ser Arg Leu Gly Phe Gln Arg Gly Met Ala Arg Arg Pro Gly 75 Gly Asp Gly Tyr Val Ser Thr Arg Ser Gly Ala Gly Gly Asp Arg Ala 85 90 Xaa Met Ala Thr Glu Met Ala Pro Leu Phe Pro Gly Cys Asp Tyr Glu 105 100 His Trp Leu Ile Val Met Asp Lys Pro Gly Gly Glu Gly Ala Ser Lys 115 120 Gln Gln Met Ile Asp Cys Tyr Ile Gln Thr Leu Ala Lys Val Leu Gly 135 140 Ser Glu Glu Glu Ala Lys Lys Ile Tyr Asn Val Ser Cys Glu Arg 150 155 Tyr Phe Gly Phe Gly Cys Glu Ile Asp Glu Glu Thr Ser Asn Lys Leu 165 170 175 Glu Gly Leu Pro Gly Cys Ser Leu Cys Ala Pro Gly Phe Val Cys 180 185

- (2) INFORMATION FOR SEQ ID NO:3843:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 168 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..168
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578467
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3843:

Met Ala Ala Ala Ala Arg Arg Leu Leu Ser Arg Arg Ala Ser Ser

1 10 15

15 10 15

Ser Ser Leu Ser Ala Leu Leu Arg Arg Gly Ala Val Pro Glu Gln Ser 20 25 30

Leu Val Leu Arg Pro Ala Val Val Ala Ala Ala Ser Arg Leu Gly Phe
35 40 45

Gln Arg Gly Met Ala Arg Arg Pro Gly Gly Asp Gly Tyr Val Ser Thr
50 55 60

Arg Ser Gly Ala Gly Gly Asp Arg Ala Xaa Met Ala Thr Glu Met Ala 65 70 75 80

Pro Leu Phe Pro Gly Cys Asp Tyr Glu His Trp Leu Ile Val Met Asp 85 90 95

Lys Pro Gly Gly Glu Gly Ala Ser Lys Gln Gln Met Ile Asp Cys Tyr 100 105 110

Ile Gln Thr Leu Ala Lys Val Leu Gly Ser Glu Glu Glu Ala Lys Lys
115
120
125

Lys Ile Tyr Asn Val Ser Cys Glu Arg Tyr Phe Gly Phe Gly Cys Glu 130 135 140

Ile Asp Glu Glu Thr Ser Asn Lys Leu Glu Gly Leu Pro Gly Cys Ser 145 150 155 160

Leu Cys Ala Pro Gly Phe Val Cys

- (2) INFORMATION FOR SEQ ID NO:3844:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 714 base pairs
 - (B) TYPE: nucleic acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..714
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578468
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3844: 60 acatecegat cetteteteg geggeeegtt ggteaegtga eteateeece tgtgetetee tetegtggee ttgttteetg geggegaegg etggtegage ggegeegeee ttggetaggt 120 cttcqctqqq tccttccccq qcqacqaqcq tccatctqqq gtcqactqaa ctqaqcaqqc 180 240 agtaggaaga gacactatgt tgttcttctc ctacttcCaa ggagctggtg gggaaggagg 300 tgacagtgga gctcaagaat gacttggcga tccgcgggac gctccactcg gttgaccagt 360 acctcaacat caagetegag aacaceegeg tagtegacea ggacaagtat eeceacatge 420 tttcagtgcg gaactgcttc atcaggggct cggtggtgcg gtacgtgctg ctcccgcagG acqqcqtqqa catcqacatc ctccacqacq ccaccaggag ggaggcgcgc ggaggctgat 480 cctgatgcgc accegetece teacetgetg getgetgett cateceegat tgtacgaage 540 atgcatgtac ggtgtgtggt agacagatgc cccagtttag ttctttggtg cttgcctgac 600
- (2) INFORMATION FOR SEQ ID NO:3845:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 57 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..57
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578469
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3845:

Thr Ser Arg Ser Phe Ser Arg Arg Pro Val Gly His Val Thr His Pro 10 15 5

gcaatggtct tgcatggggt tgctatatta ttaccatatc gtattatcac atcg

Pro Val Leu Ser Ser Arg Gly Leu Val Ser Trp Arg Arg Arg Leu Val 25 30 20

Glu Arg Arg Arg Pro Trp Leu Gly Leu Arg Trp Val Leu Pro Arg Arg 40

Arg Ala Ser Ile Trp Gly Arg Leu Asn 55 50

- (2) INFORMATION FOR SEQ ID NO:3846:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 60 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..60
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578470
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3846:

Ile Pro Ile Leu Leu Ser Ala Ala Arg Trp Ser Arg Asp Ser Ser Pro 10 5

Cys Ala Leu Leu Ser Trp Pro Cys Phe Leu Ala Ala Thr Ala Gly Arg 25 20

Ala Ala Pro Pro Leu Ala Arg Ser Ser Leu Gly Pro Ser Pro Ala Thr 45 40

Ser Val His Leu Gly Ser Thr Glu Leu Ser Arg Gln 55

(2) INFORMATION FOR SEQ ID NO:3847:

- Client Docket No. 80145.003 Page 2287 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 40 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..40 (D) OTHER INFORMATION: / Ceres Seq. ID 1578471 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3847: Met Leu Ser Val Arg Asn Cys Phe Ile Arg Gly Ser Val Val Arg Tyr 5 10 Val Leu Leu Pro Gln Asp Gly Val Asp Ile Asp Ile Leu His Asp Ala 25 20 Thr Arg Arg Glu Ala Arg Gly Gly 35 40 (2) INFORMATION FOR SEQ ID NO:3848: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 905 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..905 (D) OTHER INFORMATION: / Ceres Seq. ID 1578472 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3848: aaacagatac acacacactc gggtaaagct atctcgagct agctagctgc tgtaascgtt 60 gccatggcca aaatggtgtt gctctgcgtg ctcgtctcct tcctcctgat gcccttggcc 120 180 tecetageee tgacgcagga ettetgegte geegacetga eetgeagega caegeeggeg 240 gggtacccgt gcaagtccag cgtcaccgcc aacgacttct acttccacgg cctggccggc 300 caqqqcaaaa taaacccact catcaaggcc gccgtgaccc cggccttcgt gggccagttc 360 ccgggcgtca acgccttggc atctctgcgg ccaggctcga catcgaggtg ggcggcgtcg 420 tgccgctgca cacccacccg gcgggctcag agctcctctt cgtgacccag ggcaccgNtc geogeogget teateagete eggetecaae acegtetaca ceaagaeget gtacgeogge 480 gacatcatgg tgttccccca gggcctgctc cactaccagt acaacgccgg canccggcgc 540 tgccgtgggc ctcgtcgcct tcagcagccc caaccccggc ctgcagatca ccgactttgc 600 gctctttgcc aacaacctcc cgtccgccgt cgtggagaag gtcaccttct tggacgacgc 660 gcaggtgaag aagctcaaga gtgtgctcgg cggcagcggt taacttgttt ttcgagacaa 720 tacagtgcag gctgggtatg catcgtcgcc gtcgtcgtct tggtccgtcg tcatcgaatg 780 gaacgcgtgt gcttgctgct gcatgcgtgc gtgcacctgt cgtcgcgtgt caaagtactc 840 gtggtctatt tcatcttacc cttatttatt catctacttt tcattcaggg atgtattcag 900 (2) INFORMATION FOR SEQ ID NO:3849: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 113 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..113
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3849: Met Ala Lys Met Val Leu Leu Cys Val Leu Val Ser Phe Leu Leu Met

10 Pro Leu Ala Ser Leu Ala Leu Thr Gln Asp Phe Cys Val Ala Asp Leu

30 25

(D) OTHER INFORMATION: / Ceres Seq. ID 1578473

Thr Cys Ser Asp Thr Pro Ala Gly Tyr Pro Cys Lys Ser Ser Val Thr 35

Ala Asn Asp Phe Tyr Phe His Gly Leu Ala Gly Gln Gly Lys Ile Asn 50

Pro Leu Ile Lys Ala Ala Val Thr Pro Ala Phe Val Gly Gln Phe Pro 65

Gly Val Asn Ala Leu Ala Ser Leu Arg Pro Gly Ser Thr Ser Arg Trp 85

Ala Ala Ser Cys Arg Cys Thr Pro Thr Arg Arg Ala Gln Ser Ser Ser 100 105 110

- (2) INFORMATION FOR SEQ ID NO:3850:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 110 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..110
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578474
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3850:

Met Val Leu Cys Val Leu Val Ser Phe Leu Leu Met Pro Leu Ala 1 5 10 15

Ser Leu Ala Leu Thr Gln Asp Phe Cys Val Ala Asp Leu Thr Cys Ser 20 25 30

Asp Thr Pro Ala Gly Tyr Pro Cys Lys Ser Ser Val Thr Ala Asn Asp 35 40 45

Phe Tyr Phe His Gly Leu Ala Gly Gln Gly Lys Ile Asn Pro Leu Ile 50 55 60

Lys Ala Ala Val Thr Pro Ala Phe Val Gly Gln Phe Pro Gly Val Asn 65 70 75 80

Ala Leu Ala Ser Leu Arg Pro Gly Ser Thr Ser Arg Trp Ala Ala Ser 85 90 95

Cys Arg Cys Thr Pro Thr Arg Arg Ala Gln Ser Ser Ser Ser 100 105 110

- (2) INFORMATION FOR SEQ ID NO:3851:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 139 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..139
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578475
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3851:

Met Val Phe Pro Gln Gly Leu Leu His Tyr Gln Tyr Asn Ala Gly Xaa 1 5 10 15

Arg Arg Cys Arg Gly Pro Arg Arg Leu Gln Gln Pro Gln Pro Arg Pro
20 25 30

Ala Asp His Arg Leu Cys Ala Leu Cys Gln Gln Pro Pro Val Arg Arg 35 40 45

Arg Gly Glu Gly His Leu Leu Gly Arg Arg Ala Gly Glu Glu Ala Gln 50 55 60

Glu Cys Ala Arg Arg Gln Arg Leu Thr Cys Phe Ser Arg Gln Tyr Ser 65 70 75 80
Ala Gly Trp Val Cys Ile Val Ala Val Val Leu Val Arg Arg His

85 90 Arg Met Glu Arg Val Cys Leu Leu His Ala Cys Val His Leu Ser 105 110 Ser Arg Val Lys Val Leu Val Val Tyr Phe Ile Leu Pro Leu Phe Ile 115 120 His Leu Leu Phe Ile Gln Gly Cys Ile Gln Phe 135 (2) INFORMATION FOR SEQ ID NO:3852: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 590 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic)

- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..590
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578479
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3852:

aaategaate gageceatee atetecattt emremgehge mgeegeegag agaeceeaae 60 eecaceeate caccacatg themgemgee tecacaceet aremeeegee ttgegeaggg 120 etacegeege egeegeeggg geeeetgeGg egteegeete etetgeagee egegeegeee 180 egetgetgee ggeggetaeeg geggtgeaa eegtgeggee ggetaeegg geggetaeegg geggetaeeg geggtgeaa eegtggegge ggetaeegge geggetaeegg aacteggagg aactggagg tggggeeege geggeeaagt tateetgtte getaeegtgt tgtttateete agteeagagg gtttatette gttegteta tgtttgttgt tgeeeatetg 420 ageagageea tgeateaace ageatggaet geggategat ggateegte geggeteete 480 ageagaeea tgeateaace ageatggaaa aaatggtget tettggteet

- (2) INFORMATION FOR SEQ ID NO:3853:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 123 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..123
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578480
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3853:

Lys Ser Asn Arg Ala His Pro Ser Pro Phe Xaa Xaa Xaa Xaa Pro Pro 1 15 15

Arg Asp Pro Asn Pro Thr His Pro Pro Pro Cys Xaa Xaa Ala Ser Thr 20 25 30

Pro Xaa Xaa Pro Pro Cys Ala Gly Leu Pro Pro Pro Pro Pro Gly Pro 35 40 45

Leu Arg Arg Pro Pro Pro Leu Gln Pro Ala Pro Pro Arg Ser Pro Arg 50 55 60

Arg Leu Arg Arg Trp Arg Arg Arg Leu Arg Trp Arg Arg Arg Leu Arg 65 70 75 80

Trp Trp Trp Arg Arg Leu Arg Arg Trp Gln Pro Trp Arg Arg Leu Arg 85 90 95
Gln Leu Arg Arg Glu Leu Glu Glu Leu Ser Gly Gly Ala Arg Ala Ala

105

Lys Leu Ser Cys Ser Leu Pro Cys Cys Leu Pro 115

(2) INFORMATION FOR SEQ ID NO:3854:

100

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 151 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..151
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578481
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3854:
- Ile Glu Ser Ser Pro Ser Ile Ser Ile Xaa Xaa Xaa Ala Ala Glu 10
- Arg Pro Gln Pro His Pro Ser Thr Thr Met Xaa Xaa Xaa Leu His Thr 20 25
- Leu Xaa Pro Ala Leu Arg Arg Ala Thr Ala Ala Ala Gly Ala Pro 40
- Ala Ala Ser Ala Ser Ser Ala Ala Arg Ala Ala Pro Leu Ser Ser Ala 55 60
- Ala Thr Ala Val Ala Ala Ala Thr Val Ala Ala Ala Thr Val 70 75
- Val Val Ala Ala Ala Thr Ala Val Ala Thr Val Ala Ala Ala Thr Ala 90 8.5
- Thr Pro Thr Gly Thr Gly Gly Thr Glu Arg Trp Gly Pro Arg Gly Gln 100 105
- Val Ile Leu Phe Ala Thr Val Leu Phe Thr Leu Val Gln Arg Val Tyr 115 120 125
- Leu Arg Ser Ser His Val Cys Cys Cys Pro Ser Val Phe Leu Ile Ala 130 135 140
- Arg Ser Leu Cys Val Ser Cys
- 150
- (2) INFORMATION FOR SEQ ID NO:3855:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 126 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..126
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578482
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3855:
- Met Xaa Xaa Xaa Leu His Thr Leu Xaa Pro Ala Leu Arg Arg Ala Thr 10 5
- Ala Ala Ala Gly Ala Pro Ala Ala Ser Ala Ser Ser Ala Ala Arg 25
- Ala Ala Pro Leu Ser Ser Ala Ala Thr Ala Val Ala Ala Ala Thr 40
- Val Ala Ala Ala Thr Val Val Val Ala Ala Thr Ala Val Ala 55 60
- Thr Val Ala Ala Ala Thr Ala Thr Pro Thr Gly Thr Gly Gly Thr Glu 75 70
- Arg Trp Gly Pro Arg Gly Gln Val Ile Leu Phe Ala Thr Val Leu Phe 8.5 90
- Thr Leu Val Gln Arg Val Tyr Leu Arg Ser Ser His Val Cys Cys 100 105
- Pro Ser Val Phe Leu Ile Ala Arg Ser Leu Cys Val Ser Cys 120
- (2) INFORMATION FOR SEQ ID NO:3856:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 747 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..747
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578486
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3856:

gacatatcgt	tcatcggatc	cagtcctctc	ccgggatctc	ctccggctat	aaatttccgg	60
ccccaattca	cccaatccag	atgcgcaaac	atcgaatcgt	ctcgctagtg	gctgccctac	120
tcgtgctgct	tgccctcgcc	gccgtttcct	ccacgcgcag	cGmacaaaag	gagtccgcgg	180
ctgacaacgc	cgggatgttg	gcaggcggca	tcaaggacgt	gccggcgaac	gagaacgacc	240
tccagctcca	ggagctcgcg	cgCttcgccg	tcaatgagca	caaccaaaag	gccaatgctc	300
ttctggggtt	cgagaagctt	gtgaaggcca	agacacaagt	ggttgctggc	acgatgtact	360
atctcactat	tgaagtgaag	gatggcgaag	tcaataagct	ctatgaagct	aaggtctggg	420
agaagccatg	ggagaacttc	aagcagctgc	aggaattcaa	gcctgttgaa	gagggtGcta	480
gcgcctaagg	atctgtcgtc	tccctgtgca	atttgctgcc	tgaagcgcaa	aactaagttg	540
cagaataagg	agctgcttcg	gaacatgcca	gagcatgcac	cctcgcgtat	tttcataaaa	600
tcagtgctct	taatgtaata	tcttgaattg	ccgtgccatg	tgtaataagt	aatatcatga	660
ataacagttg	ctattatggg	ttctaaatgt	gtattaacag	ccatccatgg	cagagttctc	720
atattacttt	gctgaagtct	ttgttgg				

- (2) INFORMATION FOR SEQ ID NO:3857:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 161 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..161
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578487
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3857:

His Ile Val His Arg Ile Gln Ser Ser Pro Gly Ile Ser Ser Gly Tyr
1 10 15

Lys Phe Pro Ala Pro Ile His Pro Ile Gln Met Arg Lys His Arg Ile 20 25 30

Val Ser Leu Val Ala Ala Leu Leu Val Leu Ala Leu Ala Ala Val 35 40 45

Ser Ser Thr Arg Ser Xaa Gln Lys Glu Ser Ala Ala Asp Asn Ala Gly 50 55 60

Met Leu Ala Gly Gly Ile Lys Asp Val Pro Ala Asn Glu Asn Asp Leu 65 70 75 80 Gln Leu Gln Glu Leu Ala Arg Phe Ala Val Asn Glu His Asn Gln Lys

85 90 95
Ala Asn Ala Leu Leu Gly Phe Glu Lys Leu Val Lys Ala Lys Thr Gln

100 100 105 110 Cly The Met Tyr Tyr Toy The Tle Cly Vel Lys Age Cly

Val Val Ala Gly Thr Met Tyr Tyr Leu Thr Ile Glu Val Lys Asp Gly
115 120 125

Glu Val Asn Lys Leu Tyr Glu Ala Lys Val Trp Glu Lys Pro Trp Glu 130 135 140

Asn Phe Lys Gln Leu Gln Glu Phe Lys Pro Val Glu Glu Gly Ala Ser 145 150 155 160 Ala

- (2) INFORMATION FOR SEQ ID NO:3858:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 135 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..135
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578488
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3858:

Met Arg Lys His Arg Ile Val Ser Leu Val Ala Ala Leu Leu Val Leu

1 5 10 15

Leu Ala Leu Ala Ala Val Ser Ser Thr Arg Ser Xaa Gln Lys Glu Ser 20 25 30

Ala Ala Asp Asn Ala Gly Met Leu Ala Gly Gly Ile Lys Asp Val Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ala Asn Glu Asn Asp Leu Gln Leu Gln Glu Leu Ala Arg Phe Ala Val 50 55 60

Asn Glu His Asn Gln Lys Ala Asn Ala Leu Leu Gly Phe Glu Lys Leu 65 70 75 80

Val Lys Ala Lys Thr Gln Val Val Ala Gly Thr Met Tyr Tyr Leu Thr 85 90 95

Ile Glu Val Lys Asp Gly Glu Val Asn Lys Leu Tyr Glu Ala Lys Val
100 105 110

Trp Glu Lys Pro Trp Glu Asn Phe Lys Gln Leu Gln Glu Phe Lys Pro 115 120 125

Val Glu Glu Gly Ala Ser Ala 130 135

- (2) INFORMATION FOR SEQ ID NO:3859:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 97 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..97
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578489
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3859:

Met Leu Ala Gly Gly Ile Lys Asp Val Pro Ala Asn Glu Asn Asp Leu 1 5 10 15

Gln Leu Gln Glu Leu Ala Arg Phe Ala Val Asn Glu His Asn Gln Lys
20 25 30

Ala Asn Ala Leu Leu Gly Phe Glu Lys Leu Val Lys Ala Lys Thr Gln 35 40 45

Val Val Ala Gly Thr Met Tyr Tyr Leu Thr Ile Glu Val Lys Asp Gly 50 55 60

Glu Val Asn Lys Leu Tyr Glu Ala Lys Val Trp Glu Lys Pro Trp Glu 65 70 75 80

Asn Phe Lys Gln Leu Gln Glu Phe Lys Pro Val Glu Glu Gly Ala Ser 85 90 95

Ala

- (2) INFORMATION FOR SEQ ID NO:3860:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 781 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..781
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578490
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3860:

agacagcctc	cccattcatc	agattcagat	cagatcgtag	cagccaagga	ttccgcgctc	60
		agctcctctc				120
		cggcgtcggc				180
gggcgccccg	tcgcagtcgg	agttggagtc	ggacccggag	aaccagtgcg	tgtacacggt	240
gtacgtgcgg	acggggtcca	tctggaaggg	cggcacggac	tcgaccatcg	gcgtgacgct	300
gctgggcgCc	cgacggcacg	ggcatccgga	tccgggacct	ggcggggtgg	ggcggcctca	360
tgggcgccgg	ccacgactac	tacgagcgcg	gcaacctgga	catcttcagc	ggccggggcc	420
cctgcatgag	ccaGGgcgcc	ctgcGvcatg	aacctcacct	ccgacggcac	cggcgcgcac	480
cacggctggt	actgcaacta	cctcgaggcc	acggtcacgg	ggccccacct	cgggtgcgcg	540
cagcagctct	tcaccgtcga	gcagtggctc	gccaccgacg	cgtcgcccta	ccgcctgtac	600
gcggtcgtcg	acaagtgcaa	gacgaagsgg	caggagncgc	gacgctcgcc	ggccggcgag	660
gccgaggcca	ccgtgaccgc	gctctaggta	cgaccagtag	taaatcatcg	acagaggcta	720
gctcctgcct	ctgctgtgtg	taattactgt	atgtgagtga	ccgatcccat	cggattgcgt	780
t						

- (2) INFORMATION FOR SEQ ID NO:3861:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 142 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..142
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578491
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3861:

Arg Gln Pro Pro His Ser Ser Asp Ser Asp Gln Ile Val Ala Ala Lys

1 10 15

Asp Ser Ala Leu Arg Gly Cys His Glu Ala Glu Ala Pro Leu Ser Leu 20 25 30

Pro Ser Pro Pro Arg Leu Leu Cys His Arg Gly Val Arg Gly Val Gly 35 40 45

Val Gly Val Ala Arg Gly Gly Arg Gln Gly Arg Gly Arg Pro Val 50 55 60

Ala Val Gly Val Gly Val Gly Pro Gly Glu Pro Val Arg Val His Gly 65 70 75 80
Val Arg Ala Asp Gly Val His Leu Glu Gly Arg His Gly Leu Asp His

85 90 95

Arg Arg Asp Ala Ala Gly Arg Pro Thr Ala Arg Ala Ser Gly Ser Gly 100 105 110

Thr Trp Arg Gly Gly Ala Ala Ser Trp Ala Pro Ala Thr Thr Thr

115

120

125

Ser Ala Ala Thr Trp Thr Ser Ser Ala Ala Cly Ala Pro Ala

Ser Ala Ala Thr Trp Thr Ser Ser Ala Ala Gly Ala Pro Ala 130 135 140

- (2) INFORMATION FOR SEQ ID NO:3862:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 126 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..126
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578492
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3862:
- Met Lys Leu Lys Leu Leu Ser Pro Cys Leu Leu Leu Leu Ala Phe Phe 1 5 10 15
- Ala Thr Ala Ala Tyr Ala Ala Ser Ala Ser Ala Ser Arg Ala Ala Ala 20 25 30
- Val Val Arg Gly Ala Gly Ala Pro Ser Gln Ser Glu Leu Glu Ser Asp

40 Pro Glu Asn Gln Cys Val Tyr Thr Val Tyr Val Arg Thr Gly Ser Ile 55 Trp Lys Gly Gly Thr Asp Ser Thr Ile Gly Val Thr Leu Leu Gly Ala 70 Arg Arg His Gly His Pro Asp Pro Gly Pro Gly Gly Val Gly Arg Pro 90 His Gly Arg Arg Pro Arg Leu Leu Arg Ala Arg Gln Pro Gly His Leu 100 105 Gln Arg Pro Gly Pro Leu His Glu Pro Gly Arg Pro Ala Xaa 115 120 (2) INFORMATION FOR SEQ ID NO:3863: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 127 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: ~ (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..127 (D) OTHER INFORMATION: / Ceres Seq. ID 1578493 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3863: Met Gly Ala Gly His Asp Tyr Tyr Glu Arg Gly Asn Leu Asp Ile Phe 10 Ser Gly Arg Gly Pro Cys Met Ser Gln Gly Ala Leu Xaa His Glu Pro 25 His Leu Arg Arg His Arg Arg Ala Pro Arg Leu Val Leu Gln Leu Pro 40 Arg Gly His Gly His Gly Ala Pro Pro Arg Val Arg Ala Ala Leu 55 His Arg Arg Ala Val Ala Arg His Arg Arg Val Ala Leu Pro Pro Val 70 75 Arg Gly Arg Arg Gln Val Gln Asp Glu Xaa Ala Gly Xaa Ala Thr Leu 90 Ala Gly Arg Arg Gly Arg Gly His Arg Asp Arg Ala Leu Gly Thr Thr 105 100 110 Ser Ser Lys Ser Ser Thr Glu Ala Ser Ser Cys Leu Cys Cys Val 115 120 (2) INFORMATION FOR SEQ ID NO: 3864: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 714 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..714 (D) OTHER INFORMATION: / Ceres Seq. ID 1578510 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3864:

atcagecteg attgattegt etteeettte eetegatete eatteteeag tgtggtegtg 60 cagtgttctc tttcttgcct gagatacgat acgaagatca gcccctgarc cgatcccatg 120 getgewgett cceteteceg tecageaacg ceggemgege tecGgeacgg ggegtgeeac 180 gggctGgggc tggcgctacc gaggaNgttt kycGccgtcg gCGgcaaNcg cgatgcgccg 240 cgCtacgccg ggacgcgagc ggcggccggg accagtacgg aggcgcgctg gtggacgagg 300 gcatgcccgt gctgcggcgg cggatccggg aggcgtggat ggtggagacc aactacgagg 360 cgcccgccga gtgggcgccg tgggagaagc ggtactaccc cgcctaCgtc tccgacgtgt 420 ctagcctcgt cggcgcgctg cagctgctgc tcatgggcac caggcccggc gtcgccatcg 480 ccgtcgccgc cctggtgctg gccagcgtcc ccgtgtccac cgtcgccgcg ctacacatct 540 ggcgatggtg gccgaggccg tcctgcagtc cgtccatcac atttcttgat ccagtcggac 600

catcttttgg teteetttt tetttteatt tgtaacettg aggeagtetg eegegtgaat 660 agtattggag gettgtagtt geagetggat tgatetaaag attetttage ettg

- (2) INFORMATION FOR SEQ ID NO:3865:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 210 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..210
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578511
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3865:

Gln Pro Arg Leu Ile Arg Leu Pro Phe Pro Ser Ile Ser Ile Leu Gln
1 5 10 15

Cys Gly Arg Ala Val Phe Ser Phe Leu Pro Glu Ile Arg Tyr Glu Asp 20 25 30

Gln Pro Leu Xaa Arg Ser His Gly Cys Xaa Phe Pro Leu Pro Ser Ser 35 40 45

Asn Ala Gly Xaa Ala Pro Ala Arg Gly Val Pro Arg Ala Gly Ala Gly
50 60

Ala Thr Glu Xaa Val Xaa Arg Arg Arg Arg Gln Xaa Arg Cys Ala Ala 65 70 75 80

Leu Arg Arg Asp Ala Ser Gly Gly Arg Asp Gln Tyr Gly Gly Ala Leu
85 90 95

Val Asp Glu Gly Met Pro Val Leu Arg Arg Arg Ile Arg Glu Ala Trp 100 105 110

Met Val Glu Thr Asn Tyr Glu Ala Pro Ala Glu Trp Ala Pro Trp Glu
115 120 125

Lys Arg Tyr Tyr Pro Ala Tyr Val Ser Asp Val Ser Ser Leu Val Gly
130 135 140

Ala Leu Gln Leu Leu Met Gly Thr Arg Pro Gly Val Ala Ile Ala 145 150 155 160

Val Ala Ala Leu Val Leu Ala Ser Val Pro Val Ser Thr Val Ala Ala 165 170 175

Leu His Ile Trp Arg Trp Trp Pro Arg Pro Ser Cys Ser Pro Ser Ile
180
185
190
Thr Pho Lou Asp Pro Yel Cly Pro Ser Pho Cly Lou Ley Pho Ser Pho

Thr Phe Leu Asp Pro Val Gly Pro Ser Phe Gly Leu Leu Phe Ser Phe 195 200 205

His Leu

210

- (2) INFORMATION FOR SEQ ID NO:3866:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 186 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..186
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578512
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3866:

Met Ala Xaa Ala Ser Leu Ser Arg Pro Ala Thr Pro Xaa Ala Leu Arg
1 10 15

His Gly Ala Cys His Gly Leu Gly Leu Ala Leu Pro Arg Xaa Phe Xaa 20 25 30

Ala Val Gly Gly Xaa Arg Asp Ala Pro Arg Tyr Ala Gly Thr Arg Ala 35 40 45

Ala Ala Gly Thr Ser Thr Glu Ala Arg Trp Trp Thr Arg Ala Cys Pro

120

300

50 55 Cys Cys Gly Gly Ser Gly Arg Arg Gly Trp Trp Arg Pro Thr Thr 75 70 Arg Arg Pro Pro Ser Gly Arg Arg Gly Arg Ser Gly Thr Thr Pro Pro Thr Ser Pro Thr Cys Leu Ala Ser Ser Ala Arg Cys Ser Cys Ser 100 105 Trp Ala Pro Gly Pro Ala Ser Pro Ser Pro Ser Pro Pro Trp Cys Trp 120 125 Pro Ala Ser Pro Cys Pro Pro Ser Pro Arg Tyr Thr Ser Gly Asp Gly 135 140 Gly Arg Gly Arg Pro Ala Val Arg Pro Ser His Phe Leu Ile Gln Ser 155 160 150 Asp His Leu Leu Val Ser Phe Phe Leu Phe Ile Cys Asn Leu Glu Ala 165 170 Val Cys Arg Val Asn Ser Ile Gly Gly Leu 180 185 (2) INFORMATION FOR SEQ ID NO:3867: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 110 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..110 (D) OTHER INFORMATION: / Ceres Seq. ID 1578513 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3867: Met Pro Val Leu Arg Arg Ile Arg Glu Ala Trp Met Val Glu Thr 5 10 Asn Tyr Glu Ala Pro Ala Glu Trp Ala Pro Trp Glu Lys Arg Tyr Tyr 2.0 25 Pro Ala Tyr Val Ser Asp Val Ser Ser Leu Val Gly Ala Leu Gln Leu 4.0 Leu Leu Met Gly Thr Arg Pro Gly Val Ala Ile Ala Val Ala Ala Leu 55 Val Leu Ala Ser Val Pro Val Ser Thr Val Ala Ala Leu His Ile Trp 70 75 Arg Trp Trp Pro Arg Pro Ser Cys Ser Pro Ser Ile Thr Phe Leu Asp 90 85 Pro Val Gly Pro Ser Phe Gly Leu Leu Phe Ser Phe His Leu 100 105 (2) INFORMATION FOR SEQ ID NO:3868: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 683 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..683 (D) OTHER INFORMATION: / Ceres Seq. ID 1578524 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3868: aagcagaccc gggcgggccc tggcaattca cgcacctsgc gtgcacacag acacaggcag gcacacageg caatcacegt etegeetege agtegtacte aeggtettge acacaceegt coccatocto ttooggtgto gocatoccot cogtogacog cogogtcogg cogoggcaac

ccgacctgtg tcaatcgcca tgactacctc aaggcgtctt gctgatagga agatatcacg atttgagaag aatatcacaa agaggggctc tgttcctgag acagccaaga aggcaaacga

ttatcctgtt gggcctattc ttcttgggtt ctttgtcttc gtggttgttg gatcatctct

ctttcagatc atcaagacag catcaaacge tggtctattc tgaggtgaat cggttgacac 420 atgcagtttg tcactagaaa ctatacaagt gtagggcgtg gcttaatgtc gcctttttaa 480 tgttgtaccg tggagagttt taagttatat atgtaatgga agtgctaatt taagtcacct 540 gtctgacagg aaagatgttg gagtagtCca taatacatat cgagtatagt tatagttcgt 600 gttaaatatt tctatgctca aattggtcgc atcattgggc tattgtactc ttcgatttat 660 cgagtaattt ggtaatcttt cgc

- (2) INFORMATION FOR SEQ ID NO:3869:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 74 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..74
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578525
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3869:

Lys Gln Thr Arg Ala Gly Pro Gly Asn Ser Arg Thr Xaa Arg Ala His

1 10 15

Arg His Arg Gln Ala His Ser Ala Ile Thr Val Ser Pro Arg Ser Arg 20 25 30

Thr His Gly Leu Ala His Thr Arg Pro His Pro Leu Pro Val Ser Pro 35 40 45

Ser Pro Pro Ser Thr Ala Ala Ser Gly Arg Gly Asn Pro Thr Cys Val 50 55 60

Asn Arg His Asp Tyr Leu Lys Ala Ser Cys 65 70

- (2) INFORMATION FOR SEQ ID NO:3870:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 133 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..133
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578526
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3870:

Asp Thr Gly Arg His Thr Ala Gln Ser Pro Ser Arg Leu Ala Val Val 20 25 30

Leu Thr Val Leu His Thr Pro Val Pro Ile Leu Phe Arg Cys Arg His 35 40 45

Pro Leu Arg Arg Pro Pro Arg Pro Ala Ala Ala Thr Arg Pro Val Ser 50 55 60

Ile Ala Met Thr Thr Ser Arg Arg Leu Ala Asp Arg Lys Ile Ser Arg 65 70 75 80

Phe Glu Lys Asn Ile Thr Lys Arg Gly Ser Val Pro Glu Thr Ala Lys 85 90 95

Lys Ala Asn Asp Tyr Pro Val Gly Pro Ile Leu Leu Gly Phe Phe Val 100 105 110

Phe Val Val Gly Ser Ser Leu Phe Gln Ile Ile Lys Thr Ala Ser 115 120 125

Asn Ala Gly Leu Phe

130

- (2) INFORMATION FOR SEQ ID NO:3871:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..67
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578527
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3871:

Met Thr Thr Ser Arg Arg Leu Ala Asp Arg Lys Ile Ser Arg Phe Glu

1 10 15

Lys Asn Ile Thr Lys Arg Gly Ser Val Pro Glu Thr Ala Lys Lys Ala 20 25 30

Asn Asp Tyr Pro Val Gly Pro Ile Leu Leu Gly Phe Phe Val Phe Val 35 40 45

Val Val Gly Ser Ser Leu Phe Gln Ile Ile Lys Thr Ala Ser Asn Ala 50 55 60

Gly Leu Phe

65

- (2) INFORMATION FOR SEQ ID NO:3872:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 707 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..707
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578540
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3872:

atccatatgc actagcagta tcacctcatt taatatgcgg ccggcatcgt cgccagagct 60 ctcgataagg ctcgccagas tctcatctca tacgccggag gtgctccaga gagcagggct 120 qaaqaqqtqc qqcaaqaqct qcaqqctqaq qtacaccaac tatcgcqcqc tqatctgggc 180 qacqaactqc qtqcqcqTtt tqcaqqtqqt ccctqatcqc gaaGcaqctg ccggggcgga 240 cgggcaacga cgtgaggaac cgttggaaca cgaaactgag agcaagcagc tgcggcagcg 300 egggategae eccaeegeee ceategeegg ecteatgeae atettegteg gegeeetete 360 cttacggcga cgacggcacg ggaacgacga cggcacggga gagatcatcg acgccaccct 420 ggactgRcga caagaagaca cgggtggacc agctcatcgc ctagctgctg gccgacccgg 480 cctactacgc tggctcctcc tccgagatgg gctggatcat gggcttgatg aatgctgatt 540 aattagcggt tatacaatgg atccatgagg ctaaagcaaa ctgactgaaa tagtcacttt 600 agaggetaaa gttteaaaca taaagaacta aaagggacta aaatgtttta geteetttag 660 cttqtaaqqa cqaqttaaac tcqactaaaa caqctqqtcc cacaccc

- (2) INFORMATION FOR SEQ ID NO:3873:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 178 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..178
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578541
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3873:

Ser Ile Cys Thr Ser Ser Ile Thr Ser Phe Asn Met Arg Pro Ala Ser 1 5 10 15

Ser Pro Glu Leu Ser Ile Arg Leu Ala Arg Xaa Ser Ser His Thr Pro 20 25 30

Glu Val Leu Gln Arg Ala Gly Leu Lys Arg Cys Gly Lys Ser Cys Arg

Leu Arg Tyr Thr Asn Tyr Arg Ala Leu Ile Trp Ala Thr Asn Cys Val 55 Arg Val Leu Gln Val Val Pro Asp Arg Glu Ala Ala Ala Gly Ala Asp 70 75 Gly Gln Arg Arg Glu Glu Pro Leu Glu His Glu Thr Glu Ser Lys Gln 90 Leu Arg Gln Arg Gly Ile Asp Pro Thr Ala Pro Ile Ala Gly Leu Met 100 105 110 His Ile Phe Val Gly Ala Leu Ser Leu Arg Arg Arg His Gly Asn 115 120 125 Asp Asp Gly Thr Gly Glu Ile Ile Asp Ala Thr Leu Asp Xaa Arg Gln 130 135 140 Glu Asp Thr Gly Gly Pro Ala His Arg Leu Ala Ala Gly Arg Pro Gly 145 150 155 160 Leu Leu Arg Trp Leu Leu Arg Asp Gly Leu Asp His Gly Leu Asp 165 170 Glu Cys

- (2) INFORMATION FOR SEQ ID NO:3874:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 167 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..167
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578542
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3874:

Met Arg Pro Ala Ser Ser Pro Glu Leu Ser Ile Arg Leu Ala Arg Xaa 1 5 10 15

Ser Ser His Thr Pro Glu Val Leu Gln Arg Ala Gly Leu Lys Arg Cys 20 25 30

Gly Lys Ser Cys Arg Leu Arg Tyr Thr Asn Tyr Arg Ala Leu Ile Trp 35 40 45

Ala Thr Asn Cys Val Arg Val Leu Gln Val Val Pro Asp Arg Glu Ala 50 55 60

Ala Ala Gly Ala Asp Gly Gln Arg Arg Glu Glu Pro Leu Glu His Glu 65 70 75 80

Thr Glu Ser Lys Gln Leu Arg Gln Arg Gly Ile Asp Pro Thr Ala Pro
85 90 95

Ile Ala Gly Leu Met His Ile Phe Val Gly Ala Leu Ser Leu Arg Arg
100 105 110

Arg Arg His Gly Asn Asp Asp Gly Thr Gly Glu Ile Ile Asp Ala Thr
115 120 125

Leu Asp Xaa Arg Gln Glu Asp Thr Gly Gly Pro Ala His Arg Leu Ala 130 135 140

Ala Gly Arg Pro Gly Leu Leu Arg Trp Leu Leu Leu Arg Asp Gly Leu 145 150 155 160

Asp His Gly Leu Asp Glu Cys

165

- (2) INFORMATION FOR SEQ ID NO:3875:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 697 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -

- (B) LOCATION: 1..697
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578543
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3875: aaacagtoto ggoototoot cooggottoo toacaoggoa otocagoogo tagoootoac tcaaccagac aaccagtaca ccaccgccac caagcccggg ccgaataact ctgccgggca 120 accgccgccc ttcgccggca aagaacgccc accagatcca ccccggcctg ctatggagtc 180 cgcggtgaac ccgaaGgcgt acccgctggc tgatgcgcaG ctgacgatgg gtatcctcga 240 300 tatcatccag caggccgcca actacaagca gctcaagaag ggagcgaacg aagcgacgaa aaccctgaat agggggatat cggagttcgt tgtgatggcg gcggacacgg agcctctcga 360 gatcctgctc cacctcccct tgttagccga ggataagaac gtcccatatg tatttgttcc 420 atcgaaacaa gctcttggcc gtgcttgtgg tgtgacaaga cccgtcattg cttgctcagt 480 gaccagcaat gagggtagcc agctgaaaca acagatacag ggtctcaagg actcgattga 540 gaagettete atetgattta cetaagatet tteagtgtga tgggeetegg egacacattt 600 ttcagaggct tggactggtg atggtgtctt gtttacatta cgctttccaa actatatttg 660 aacactgcta agtcaatcat atttgaattg tgcttcg
- (2) INFORMATION FOR SEQ ID NO:3876:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 184 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..184
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578544
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3876:
- Asn Ser Leu Gly Leu Ser Ser Arg Leu Pro His Thr Ala Leu Gln Pro 1 5 10 15
- Leu Ala Leu Thr Gln Pro Asp Asn Gln Tyr Thr Thr Ala Thr Lys Pro 20 25 30
- Gly Pro Asn Asn Ser Ala Gly Gln Pro Pro Pro Phe Ala Gly Lys Glu
 35 40 45
- Arg Pro Pro Asp Pro Pro Arg Pro Ala Met Glu Ser Ala Val Asn Pro 50 55 60
- Lys Ala Tyr Pro Leu Ala Asp Ala Gln Leu Thr Met Gly Ile Leu Asp 65 75 80
- Ile Ile Gln Gln Ala Ala Asn Tyr Lys Gln Leu Lys Lys Gly Ala Asn 85 90 95
- 115 120 125
 Ala Glu Asp Lys Asn Val Pro Tyr Val Phe Val Pro Ser Lys Gln Ala
- Ala Glu Asp Lys Asn Val Pro Tyr Val Phe Val Pro Ser Lys Gin Ala 130 135 140
- Leu Gly Arg Ala Cys Gly Val Thr Arg Pro Val Ile Ala Cys Ser Val
 145 150 155 160
- Thr Ser Asn Glu Gly Ser Gln Leu Lys Gln Gln Ile Gln Gly Leu Lys

 165

 170

 175
- Asp Ser Ile Glu Lys Leu Leu Ile 180
- (2) INFORMATION FOR SEQ ID NO:3877:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 127 amino acids(B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..127

(D) OTHER INFORMATION: / Ceres Seq. ID 1578545 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3877: Met Glu Ser Ala Val Asn Pro Lys Ala Tyr Pro Leu Ala Asp Ala Gln 10 Leu Thr Met Gly Ile Leu Asp Ile Ile Gln Gln Ala Ala Asn Tyr Lys 20 25 Gln Leu Lys Lys Gly Ala Asn Glu Ala Thr Lys Thr Leu Asn Arg Gly 40 Ile Ser Glu Phe Val Val Met Ala Asp Thr Glu Pro Leu Glu Ile 55 60 Leu Leu His Leu Pro Leu Leu Ala Glu Asp Lys Asn Val Pro Tyr Val 75 70 Phe Val Pro Ser Lys Gln Ala Leu Gly Arg Ala Cys Gly Val Thr Arg 85 90 Pro Val Ile Ala Cys Ser Val Thr Ser Asn Glu Gly Ser Gln Leu Lys 100 105 110 Gln Gln Ile Gln Gly Leu Lys Asp Ser Ile Glu Lys Leu Leu Ile 120 (2) INFORMATION FOR SEQ ID NO:3878: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 109 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..109
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578546
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3878:

Met Gly Ile Leu Asp Ile Ile Gln Gln Ala Ala Asn Tyr Lys Gln Leu 1 $$ 5 $$ 10 $$ 15

Lys Lys Gly Ala Asn Glu Ala Thr Lys Thr Leu Asn Arg Gly Ile Ser 20 25 30

Glu Phe Val Val Met Ala Ala Asp Thr Glu Pro Leu Glu Ile Leu Leu 35 40 45

His Leu Pro Leu Leu Ala Glu Asp Lys Asn Val Pro Tyr Val Phe Val 50 55 60

Pro Ser Lys Gln Ala Leu Gly Arg Ala Cys Gly Val Thr Arg Pro Val 65 70 75 80

Ile Ala Cys Ser Val Thr Ser Asn Glu Gly Ser Gln Leu Lys Gln Gln

85 90
Ile Gln Gly Leu Lys Asp Ser Ile Glu Lys Leu Leu Ile

- 100 105
- (2) INFORMATION FOR SEQ ID NO:3879:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 472 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..472
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578582
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3879:

gatcagttag tagttcacca gagttcacac aaaaatcaca agcaagcagt cgcgtgtgta 60 gctcgcaaca atggcgacga accccggcct cttcaccgag tggccgtgga agaagctcgg 120 caacttcaag gtagctcccg gcaccggccc cgtctcagta ccctgcgtgc gtacgtccat 180 ggcacagagc gggggagaag gtgaaggaaa attagcaact cgtcttctgc tcaccggcgg 240 cgtgccatgc catggcaatc ttgggcgcat ggtatatggc catgtgcggc acgCagtgtc 300

ggaacatgca tgcacgcatg gacttgctat acatacatgc atgcaccggc agccgtgaga 360 ccatctgtgc atgagtctta tgctcctgtg catctcatgt tccggccgac ccatgagcat 420 ggaaggaagc caccaaaagt tcattaattt gataggtcgc gtgtgcatgg ct

- (2) INFORMATION FOR SEQ ID NO:3880:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..67
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578583
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3880:

Asp Gln Leu Val Val His Gln Ser Ser His Lys Asn His Lys Gln Ala 1 5 10 15

Val Ala Cys Val Ala Arg Asn Asn Gly Asp Glu Pro Arg Pro Leu His 20 25 30

Arg Val Ala Val Glu Glu Ala Arg Gln Leu Gln Gly Ser Ser Arg His
35 40 45

Arg Pro Arg Leu Ser Thr Leu Arg Ala Tyr Val His Gly Thr Glu Arg 50 55 60

Gly Arg Arg

55

- (2) INFORMATION FOR SEQ ID NO:3881:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..95
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578584
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3881:

Met Ala Thr Asn Pro Gly Leu Phe Thr Glu Trp Pro Trp Lys Lys Leu 1 5 10 15

Gly Asn Phe Lys Val Ala Pro Gly Thr Gly Pro Val Ser Val Pro Cys 20 25 30

Val Arg Thr Ser Met Ala Gln Ser Gly Gly Glu Gly Lys Leu 35 40 45

Ala Thr Arg Leu Leu Thr Gly Gly Val Pro Cys His Gly Asn Leu 50 55 60

Gly Arg Met Val Tyr Gly His Val Arg His Ala Val Ser Glu His Ala 65 70 75 80 Cys Thr His Gly Leu Ala Ile His Thr Cys Met His Arg Gln Pro

90

- (2) INFORMATION FOR SEQ ID NO:3882:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 66 amino acids

85

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..66
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578585
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3882:

780

Met Pro Trp Gln Ser Trp Ala His Gly Ile Trp Pro Cys Ala Ala Arg 10 Ser Val Gly Thr Cys Met His Ala Trp Thr Cys Tyr Thr Tyr Met His 2.0 25 30 Ala Pro Ala Ala Val Arg Pro Ser Val His Glu Ser Tyr Ala Pro Val 40 45 His Leu Met Phe Arg Pro Thr His Glu His Gly Arg Lys Pro Pro Lys 50 55 Val His 65

- (2) INFORMATION FOR SEQ ID NO:3883:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 780 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..780
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578586
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3883: aattcacgac cttattgata ctccccactg cacaaagatg acatagagaa acatgtgaag 60 gagetettgg cetegggtat gategteece agtaatagee catttgeete eeeggttttg 120 tgtcaattac tggaagttaa actcactatc aaaaaccggt ttcccattcc gatcatcgat 180 240 gaaattctgg acgagttggc aggcaccaaa cttttcacca agctggacat gagatcgggt 300 taccatcaag tcgggatgca ttcagatgat gagtttaaaa cgacattcaa aatacatcat 360 qqacattttc agtttcattq ttgacagact tcagttcgca agacctgttg ccggatcaac ttctggactg tcgcttggtg aagaaaggca gtaaggcggt tccacaagtg ttagtccaat 420 480 qqcqcaatct tctaqctqct tctqctacqt qqqaqqactq qtacqtqttq aagaatcact ttccacacat ggctgcttgg ggacaggcat caactgaagg ggagggagat gtagcgCccg 540 acqtgtcGqq tqcqgtacaq gagtctgcaq aagccgtgcc caagtgaagg cgtaatgtgt 600 taggctccgt catttacttt gttaagagtc atttaaggta ccattggtgg gctcaatgta 660 720 atgaccagca actatgctgt taaggtcctt gtggtcggaa cctgaggaac attatcatgc
- (2) INFORMATION FOR SEQ ID NO:3884:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 81 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

Cys

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..81
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578587

aaaaagaata tacacgaaag tgaactcggg gttgccttgc ctcgcaagtt catcatccct

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3884:

Met Ile Val Pro Ser Asn Ser Pro Phe Ala Ser Pro Val Leu Cys Gln 10 Leu Leu Glu Val Lys Leu Thr Ile Lys Asn Arg Phe Pro Ile Pro Ile

20 25 30 Ile Asp Glu Ile Leu Asp Glu Leu Ala Gly Thr Lys Leu Phe Thr Lys

40 Leu Asp Met Arg Ser Gly Tyr His Gln Val Gly Met His Ser Asp Asp 55 60

Glu Phe Lys Thr Thr Phe Lys Ile His His Gly His Phe Gln Phe His 70 65

(2) INFORMATION FOR SEQ ID NO:3885:

- (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 42 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..42 (D) OTHER INFORMATION: / Ceres Seq. ID 1578588 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3885: Met Met Ser Leu Lys Arg His Ser Lys Tyr Ile Met Asp Ile Phe Ser 10 5 Phe Ile Val Asp Arg Leu Gln Phe Ala Arg Pro Val Ala Gly Ser Thr 30 25 2.0 Ser Gly Leu Ser Leu Gly Glu Glu Arg Gln 4.0 (2) INFORMATION FOR SEQ ID NO:3886: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 41 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..41 (D) OTHER INFORMATION: / Ceres Seq. ID 1578589 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3886: Met Ser Leu Lys Arg His Ser Lys Tyr Ile Met Asp Ile Phe Ser Phe 10 Ile Val Asp Arg Leu Gln Phe Ala Arg Pro Val Ala Gly Ser Thr Ser 25 20 Gly Leu Ser Leu Gly Glu Glu Arg Gln 40 35 (2) INFORMATION FOR SEQ ID NO:3887: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 514 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..514 (D) OTHER INFORMATION: / Ceres Seq. ID 1578590 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3887: ategcacteg tagtegtage teaagcatea revgeaggag etetgggeag egtgegeaeg 60 trgggtacet agetegetet getageetac catggetgat caccaceggg gegegaeggg 120 argtgscggg ggctacggcg acctccagcg cgggggcggc atgcacggcg aggcgcagCa 180 gcagcagaag cagggcgcca tgatgacggc gctcaaggcc gcgacggccg cgacctcctt 240 gaaccactgc cggcgcggcg gcatatggcc cttaaaggcg gtggctgctg ctacgtacgc 300 tgccgtagag tctcggtcgc cgcgatagCt ctagctagtc gtttatgtgt tgtgctttgt 360 420 tetetttgat eggagaggeg gatgtacage atgetegata tgtetagttt ggatgteatg 480 tttatgatga ggaataaaat gcagtgttca ggtg (2) INFORMATION FOR SEQ ID NO:3888: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 66 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

Client Docket No. 80145.003 (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..66 (D) OTHER INFORMATION: / Ceres Seq. ID 1578591 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3888: Arg Thr Arg Ser Arg Ser Ser Ser Ile Xaa Xaa Arg Ser Ser Gly Gln 1.0 Arg Ala His Xaa Gly Tyr Leu Ala Arg Ser Ala Ser Leu Pro Trp Leu 20 25 Ile Thr Thr Gly Ala Arg Arg Xaa Val Xaa Gly Ala Thr Ala Thr Ser 40 Ser Ala Gly Ala Ala Cys Thr Ala Arg Arg Ser Ser Arg Ser Arg 55 Ala Pro 65 (2) INFORMATION FOR SEQ ID NO:3889: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 78 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..78 (D) OTHER INFORMATION: / Ceres Seq. ID 1578592 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3889: Met Ala Asp His His Arg Gly Ala Thr Gly Xaa Xaa Gly Gly Tyr Gly 10 5 Asp Leu Gln Arg Gly Gly Gly Met His Gly Glu Ala Gln Gln Gln 25 Lys Gln Gly Ala Met Met Thr Ala Leu Lys Ala Ala Thr Ala Ala Thr 45 4.0 Ser Leu Asn His Cys Arg Arg Gly Gly Ile Trp Pro Leu Lys Ala Val 55 Ala Ala Ala Thr Tyr Ala Ala Val Glu Ser Arg Ser Pro Arg 70 (2) INFORMATION FOR SEQ ID NO:3890: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 55 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..55 (D) OTHER INFORMATION: / Ceres Seq. ID 1578593 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3890: Met His Gly Glu Ala Gln Gln Gln Lys Gln Gly Ala Met Met Thr 10 5 Ala Leu Lys Ala Ala Thr Ala Ala Thr Ser Leu Asn His Cys Arg Arg 25

Gly Gly Ile Trp Pro Leu Lys Ala Val Ala Ala Ala Thr Tyr Ala Ala

- Val Glu Ser Arg Ser Pro Arg
 50 55
- (2) INFORMATION FOR SEQ ID NO:3891:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1077 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1077
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578630
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3891: 60 gtaccttgtt tcatgctcag ttgatggaat aattgaagtc tgggattatc ttagtggaaa gcttaaaaag gatcttcaat atcaagccga tgaaagcttt atgatgcacg aggaacctgt 120 gctgtgtgtt gattttagta gggattctga aatgctggca tctggatcac aggatggaaa 180 240 gattaaggtt tggcgtatac gaactggtca gtgcttgcaa cgccttgagc gtgcacattc gaaaggtgtt acaagtgtta cattttcacg tgatggaacc caaatattga gtacatcctt 300 tgacactacc gcgagggtac atggcctcaa gtctggaaag atgctgaaag aatttcgagg 360 tcattcttca tatgtaaatt atgccatctt cactactgac ggtagccgtg tcattacagc 420 ttccagtgat tgtactgtta aggtctggGa tactaaaaca acagattgct tgcatacttt 480 caagccacca cctcctttga ggggaggaga tgcatctgtt aattctgtcc atttatttcc 540 aaaaaatact gatcacattg ttgtctgcaa taagacttca tcaatattca tcatKgactt 600 tacaaggaca ggttgtgaag agtttctcat caggtaagcg agaaggggga gattttgttg 660 cagcttcagt ttcaccaaaa ggagaatgga tatattgtgt tggtgaagac atgaacatgt 720 780 attgctttag ctaccaatct ggtaaactgg agcatctgat gaaggtgcat gagaaggatg tcataggcat tacgcaccat cctcacagga acttagtagc caccattgct gaggattgta 840 900 tgatgaagat atggaagcct tgactttttt tctttttaaa aaaaccttga accgatgatt aaataggatg tattttgttt tgtaatttag ataactggta ggcgctacag ctatggactc 960 gttggtgctt atgttgcccc atgtcttact accattgtat cctgtactag atttagggac 1020 ctttcaatgg tgtaaacaca gcttactacg actcctcgct acaagttcat tatggtc
- (2) INFORMATION FOR SEQ ID NO:3892:
 - (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 211 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..211
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578631
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3892:
- Tyr Leu Val Ser Cys Ser Val Asp Gly Ile Ile Glu Val Trp Asp Tyr 15 10 5
- Leu Ser Gly Lys Leu Lys Lys Asp Leu Gln Tyr Gln Ala Asp Glu Ser 25
- Phe Met Met His Glu Glu Pro Val Leu Cys Val Asp Phe Ser Arg Asp 40
- Ser Glu Met Leu Ala Ser Gly Ser Gln Asp Gly Lys Ile Lys Val Trp 55
- Arg Ile Arg Thr Gly Gln Cys Leu Gln Arg Leu Glu Arg Ala His Ser 75 70
- Lys Gly Val Thr Ser Val Thr Phe Ser Arg Asp Gly Thr Gln Ile Leu 90
- Ser Thr Ser Phe Asp Thr Thr Ala Arg Val His Gly Leu Lys Ser Gly 110 105
- Lys Met Leu Lys Glu Phe Arg Gly His Ser Ser Tyr Val Asn Tyr Ala 125 120
- Ile Phe Thr Thr Asp Gly Ser Arg Val Ile Thr Ala Ser Ser Asp Cys 140 135
- Thr Val Lys Val Trp Asp Thr Lys Thr Thr Asp Cys Leu His Thr Phe 155 150
- Lys Pro Pro Pro Leu Arg Gly Gly Asp Ala Ser Val Asn Ser Val

Attorney Docket No. 2750-1235P Client Docket No. 80145.003 165 170 His Leu Phe Pro Lys Asn Thr Asp His Ile Val Val Cys Asn Lys Thr 180 185 190 Ser Ser Ile Phe Ile Xaa Asp Phe Thr Arg Thr Gly Cys Glu Glu Phe 200 Leu Ile Arg 210 (2) INFORMATION FOR SEQ ID NO:3893: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 178 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..178 (D) OTHER INFORMATION: / Ceres Seq. ID 1578632 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3893: Met Met His Glu Glu Pro Val Leu Cys Val Asp Phe Ser Arg Asp Ser 10 5 Glu Met Leu Ala Ser Gly Ser Gln Asp Gly Lys Ile Lys Val Trp Arg 25 20 Ile Arg Thr Gly Gln Cys Leu Gln Arg Leu Glu Arg Ala His Ser Lys 40 Gly Val Thr Ser Val Thr Phe Ser Arg Asp Gly Thr Gln Ile Leu Ser 55 . Thr Ser Phe Asp Thr Thr Ala Arg Val His Gly Leu Lys Ser Gly Lys 75 70 Met Leu Lys Glu Phe Arg Gly His Ser Ser Tyr Val Asn Tyr Ala Ile 90 85 Phe Thr Thr Asp Gly Ser Arg Val Ile Thr Ala Ser Ser Asp Cys Thr 105 110 100 Val Lys Val Trp Asp Thr Lys Thr Thr Asp Cys Leu His Thr Phe Lys 120 125 Pro Pro Pro Leu Arg Gly Gly Asp Ala Ser Val Asn Ser Val His 135 140 Leu Phe Pro Lys Asn Thr Asp His Ile Val Val Cys Asn Lys Thr Ser 150 155 Ser Ile Phe Ile Xaa Asp Phe Thr Arg Thr Gly Cys Glu Glu Phe Leu 170 165 Ile Arg (2) INFORMATION FOR SEQ ID NO:3894: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 177 amino acids (B) TYPE: amino acid (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..177
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578633

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3894:

Met His Glu Glu Pro Val Leu Cys Val Asp Phe Ser Arg Asp Ser Glu 1 5 10

Met Leu Ala Ser Gly Ser Gln Asp Gly Lys Ile Lys Val Trp Arg Ile
20 25 30

Arg Thr Gly Gln Cys Leu Gln Arg Leu Glu Arg Ala His Ser Lys Gly

```
Val Thr Ser Val Thr Phe Ser Arg Asp Gly Thr Gln Ile Leu Ser Thr
                        55
Ser Phe Asp Thr Thr Ala Arg Val His Gly Leu Lys Ser Gly Lys Met
                                        75
                    70
Leu Lys Glu Phe Arg Gly His Ser Ser Tyr Val Asn Tyr Ala Ile Phe
                                    90
                85
Thr Thr Asp Gly Ser Arg Val Ile Thr Ala Ser Ser Asp Cys Thr Val
                                                    110
                                105
            100
Lys Val Trp Asp Thr Lys Thr Thr Asp Cys Leu His Thr Phe Lys Pro
                                                125
                            120
        115
Pro Pro Pro Leu Arg Gly Gly Asp Ala Ser Val Asn Ser Val His Leu
                        135
                                            140
Phe Pro Lys Asn Thr Asp His Ile Val Val Cys Asn Lys Thr Ser Ser
                   150
                                        155
Ile Phe Ile Xaa Asp Phe Thr Arg Thr Gly Cys Glu Glu Phe Leu Ile
                                    170
                165
```

- (2) INFORMATION FOR SEQ ID NO:3895:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 906 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..906
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578674
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3895: 60 aatqatattc agcttagtat tcgtatgccc agtggaaata gactggagat caaactaaca aaacaagatg ttttaaggaa agtgaagaat ttcgtggatg aaaaccaagg caatgggctt 120 ggctcatatg acctttctct ggtttatcct aaaagagttt tctctgaaca agatatggaa 180 gcaacactat ccgagctggg tattcaaaac cgtcatgcaa tgattgttgt tccacatcgg 240 cagtotggtc aggtatcaag gcgtcactcc tcggcatctt atgatatggg tgtcaattca 300 ggtgcggatg atgttggtgg caattcaggt gcggggggat actttggtta cctgagaacc 360 gtcctgtctt atgtgaatcc actctcctac ctgaggggaa ataccaactc atcaaataca 420 gagctacagt caaatgaagG Cctgcggcag cttagacatg gatctggtcc atggagtgag 480 ccacggcctc ttggcaatag gggccatgaa gtgactgatg cagactctgc aaacacgctg 540 cgaaggcggc ctagaccatt tggtgccaat atccacactc tggggagcga ggatcatggt 600 ccgtctgatg aaagaaatgt tttctggaac gggaactcga cagagtttgg aggcgacgac 660 agaaaatagg ttgtggcgtg gctggcaggg cctgggacga cactatcaga cagaatcaaa 720 gttgggaata gacagctgaa acaaatgcct cgacaggctt attgaggaat aagtattgag 780 attatagtgc tgaaataatc gctgaattgt gatgtttaca tttgtggaaa catacggtcg 840 ctggatccgt atactcgttg tatagtacat agccacagat atattaaatc cgaactgctt 900 ggttcc
- (2) INFORMATION FOR SEQ ID NO:3896:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 222 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..222
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578675
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3896:
- Asn Asp Ile Gln Leu Ser Ile Arg Met Pro Ser Gly Asn Arg Leu Glu

 1 5 10 15

 Ile Lys Leu Thr Lys Gln Asp Val Leu Arg Lys Val Lys Asn Phe Val

25 20 Asp Glu Asn Gln Gly Asn Gly Leu Gly Ser Tyr Asp Leu Ser Leu Val 40 Tyr Pro Lys Arg Val Phe Ser Glu Gln Asp Met Glu Ala Thr Leu Ser 55 Glu Leu Gly Ile Gln Asn Arg His Ala Met Ile Val Val Pro His Arg 75 70 Gln Ser Gly Gln Val Ser Arg Arg His Ser Ser Ala Ser Tyr Asp Met 90 85 Gly Val Asn Ser Gly Ala Asp Asp Val Gly Gly Asn Ser Gly Ala Gly 100 105 Gly Tyr Phe Gly Tyr Leu Arg Thr Val Leu Ser Tyr Val Asn Pro Leu 125 115 120 Ser Tyr Leu Arg Gly Asn Thr Asn Ser Ser Asn Thr Glu Leu Gln Ser 130 135 140 Asn Glu Gly Leu Arg Gln Leu Arg His Gly Ser Gly Pro Trp Ser Glu 150 155 Pro Arg Pro Leu Gly Asn Arg Gly His Glu Val Thr Asp Ala Asp Ser 165 170 175 Ala Asn Thr Leu Arg Arg Pro Arg Pro Phe Gly Ala Asn Ile His 180 185 Thr Leu Gly Ser Glu Asp His Gly Pro Ser Asp Glu Arg Asn Val Phe 195 200 205 Trp Asn Gly Asn Ser Thr Glu Phe Gly Gly Asp Asp Arg Lys 215

- (2) INFORMATION FOR SEQ ID NO:3897:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 214 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..214
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578676
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3897:
- Met Pro Ser Gly Asn Arg Leu Glu Ile Lys Leu Thr Lys Gln Asp Val
- Leu Arg Lys Val Lys Asn Phe Val Asp Glu Asn Gln Gly Asn Gly Leu 20 25 30
- Gly Ser Tyr Asp Leu Ser Leu Val Tyr Pro Lys Arg Val Phe Ser Glu 35 40 45
- Gln Asp Met Glu Ala Thr Leu Ser Glu Leu Gly Ile Gln Asn Arg His 50 55 60
- Ala Met Ile Val Val Pro His Arg Gln Ser Gly Gln Val Ser Arg Arg 65 70 75 80
 His Ser Ser Ala Ser Tyr Asp Met Gly Val Asn Ser Gly Ala Asp Asp
- 85 90 95

 Val Gly Gly Asn Ser Gly Ala Gly Gly Tyr Phe Gly Tyr Leu Arg Thr
- 100 105 110

 Val Leu Ser Tyr Val Asn Pro Leu Ser Tyr Leu Arg Gly Asn Thr Asn
 115 120 125
- Ser Ser Asn Thr Glu Leu Gln Ser Asn Glu Gly Leu Arg Gln Leu Arg
- His Gly Ser Gly Pro Trp Ser Glu Pro Arg Pro Leu Gly Asn Arg Gly 145 150 155 160
- His Glu Val Thr Asp Ala Asp Ser Ala Asn Thr Leu Arg Arg Pro 165 170 175
- Arg Pro Phe Gly Ala Asn Ile His Thr Leu Gly Ser Glu Asp His Gly
 180 185 190

Pro Ser Asp Glu Arg Asn Val Phe Trp Asn Gly Asn Ser Thr Glu Phe 195 200 205

Gly Gly Asp Asp Arg Lys 210

- (2) INFORMATION FOR SEQ ID NO:3898:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 164 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..164
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578677
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3898:

Met Glu Ala Thr Leu Ser Glu Leu Gly Ile Gln Asn Arg His Ala Met 1 5 10 15

Ile Val Val Pro His Arg Gln Ser Gly Gln Val Ser Arg Arg His Ser 20 25 30

Ser Ala Ser Tyr Asp Met Gly Val Asn Ser Gly Ala Asp Asp Val Gly 35 40 45

Gly Asn Ser Gly Ala Gly Gly Tyr Phe Gly Tyr Leu Arg Thr Val Leu
50 55 60

Ser Tyr Val Asn Pro Leu Ser Tyr Leu Arg Gly Asn Thr Asn Ser Ser 65 70 75 80

Asn Thr Glu Leu Gln Ser Asn Glu Gly Leu Arg Gln Leu Arg His Gly 85 90 95

Ser Gly Pro Trp Ser Glu Pro Arg Pro Leu Gly Asn Arg Gly His Glu 100 105 110

Val Thr Asp Ala Asp Ser Ala Asn Thr Leu Arg Arg Pro Arg Pro 115 120 125

Phe Gly Ala Asn Ile His Thr Leu Gly Ser Glu Asp His Gly Pro Ser 130 140

Asp Glu Arg Asn Val Phe Trp Asn Gly Asn Ser Thr Glu Phe Gly Gly 145 150 155 160

Asp Asp Arg Lys

- (2) INFORMATION FOR SEQ ID NO:3899:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 745 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..745
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578682

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3899:

cagacaataa tatacaatgc tgtgtttaag gctcataatg ctgttatatc agacatgcgg 60 cctggagtta attggatgga tatgcacaaa ttagcagaac gggcaatact tgaatctctc 120 aggaaggaac aaattgtaca aggggatgtt gatgatatga tggctcaaag gttaggggct 180 gttttcatgc ctcatggtct tggccactta cttggtattg acacccatga tccaggaggc 240 taccctgagg gattggagag gcccaaggat ccaggactga actccttgcg gaccacaaga 300 gaactgaaag aaggaatggt tatcacagtg gagccagget gctatttcat tgatgctttg 360 ctaactaaaa caagggatga tocaatttoo toaaagttot toaactggoa agaggttgaa 420 aagtataaaa gctttggtgg cgttcgcatt gaaagtgatg tgtatgtgac ggctcaagga 480 tgccggaacc tcacaaactg cccgagagag acctgggaga tcgaggctgt aatGgctggc 540 gcaccatggc ctctgccggc ttcaaGttct atggtggtag cagcagagAa tagcaatgac 600 atatctaaag cgtcgtaatt ttctctatgc tcaatccata tcccgagttg aaacaaattc 660 gacctggatt cttatattca ataaatagtg aggctgaggc gcaaaacatt gttggattga 720 tggctggaaa acatttcata cgccc (2) INFORMATION FOR SEQ ID NO:3900:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 205 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..205
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578683
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3900: Gln Thr Ile Ile Tyr Asn Ala Val Phe Lys Ala His Asn Ala Val Ile

10 5 Ser Asp Met Arg Pro Gly Val Asn Trp Met Asp Met His Lys Leu Ala 25

20 Glu Arg Ala Ile Leu Glu Ser Leu Arg Lys Glu Gln Ile Val Gln Gly

40 Asp Val Asp Asp Met Met Ala Gln Arg Leu Gly Ala Val Phe Met Pro

60 55 His Gly Leu Gly His Leu Leu Gly Ile Asp Thr His Asp Pro Gly Gly

75 70 Tyr Pro Glu Gly Leu Glu Arg Pro Lys Asp Pro Gly Leu Asn Ser Leu

90

Arg Thr Thr Arg Glu Leu Lys Glu Gly Met Val Ile Thr Val Glu Pro 110 105 100

Gly Cys Tyr Phe Ile Asp Ala Leu Leu Thr Lys Thr Arg Asp Asp Pro 125 120 115

Ile Ser Ser Lys Phe Phe Asn Trp Gln Glu Val Glu Lys Tyr Lys Ser 140 135

Phe Gly Gly Val Arg Ile Glu Ser Asp Val Tyr Val Thr Ala Gln Gly 155 150 Cys Arg Asn Leu Thr Asn Cys Pro Arg Glu Thr Trp Glu Ile Glu Ala

170 175 165 Val Met Ala Gly Ala Pro Trp Pro Leu Pro Ala Ser Ser Ser Met Val 185

Val Ala Ala Glu Asn Ser Asn Asp Ile Ser Lys Ala Ser 200

- (2) INFORMATION FOR SEQ ID NO:3901:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 187 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..187
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578684

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3901:

Met Arg Pro Gly Val Asn Trp Met Asp Met His Lys Leu Ala Glu Arg 5 10

Ala Ile Leu Glu Ser Leu Arg Lys Glu Gln Ile Val Gln Gly Asp Val 30 25 20

Asp Asp Met Met Ala Gln Arg Leu Gly Ala Val Phe Met Pro His Gly 40 45

Leu Gly His Leu Leu Gly Ile Asp Thr His Asp Pro Gly Gly Tyr Pro 60 55

Glu Gly Leu Glu Arg Pro Lys Asp Pro Gly Leu Asn Ser Leu Arg Thr

```
75
                 70
Thr Arg Glu Leu Lys Glu Gly Met Val Ile Thr Val Glu Pro Gly Cys
                             90
Tyr Phe Ile Asp Ala Leu Leu Thr Lys Thr Arg Asp Asp Pro Ile Ser
         100
                            105
Ser Lys Phe Phe Asn Trp Gln Glu Val Glu Lys Tyr Lys Ser Phe Gly
   115 120
Gly Val Arg Ile Glu Ser Asp Val Tyr Val Thr Ala Gln Gly Cys Arg
                    135
Asn Leu Thr Asn Cys Pro Arg Glu Thr Trp Glu Ile Glu Ala Val Met
     150 155
Ala Gly Ala Pro Trp Pro Leu Pro Ala Ser Ser Ser Met Val Val Ala
             165 170 175
Ala Glu Asn Ser Asn Asp Ile Ser Lys Ala Ser
          180 185
(2) INFORMATION FOR SEQ ID NO:3902:
    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 180 amino acids
         (B) TYPE: amino acid
         (C) STRANDEDNESS:
         (D) TOPOLOGY: linear
   (ii) MOLECULE TYPE: peptide
   (ix) FEATURE:
         (A) NAME/KEY: peptide
         (B) LOCATION: 1..180
         (D) OTHER INFORMATION: / Ceres Seq. ID 1578685
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3902:
Met Asp Met His Lys Leu Ala Glu Arg Ala Ile Leu Glu Ser Leu Arg
           5
                                10
Lys Glu Gln Ile Val Gln Gly Asp Val Asp Asp Met Met Ala Gln Arg
                            25
          20
Leu Gly Ala Val Phe Met Pro His Gly Leu Gly His Leu Leu Gly Ile
                         40
                                            45
Asp Thr His Asp Pro Gly Gly Tyr Pro Glu Gly Leu Glu Arg Pro Lys
                                        60
Asp Pro Gly Leu Asn Ser Leu Arg Thr Thr Arg Glu Leu Lys Glu Gly
                  70
                                    75
Met Val Ile Thr Val Glu Pro Gly Cys Tyr Phe Ile Asp Ala Leu Leu
                                90
               85
Thr Lys Thr Arg Asp Asp Pro Ile Ser Ser Lys Phe Phe Asn Trp Gln
                                 110
           100
                             105
Glu Val Glu Lys Tyr Lys Ser Phe Gly Gly Val Arg Ile Glu Ser Asp
                         120
                                           125
Val Tyr Val Thr Ala Gln Gly Cys Arg Asn Leu Thr Asn Cys Pro Arg
                                       140
                      135
Glu Thr Trp Glu Ile Glu Ala Val Met Ala Gly Ala Pro Trp Pro Leu
                                    155
                  150
Pro Ala Ser Ser Ser Met Val Val Ala Ala Glu Asn Ser Asn Asp Ile
                                170
Ser Lys Ala Ser
           180
 (2) INFORMATION FOR SEQ ID NO:3903:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 789 base pairs
          (B) TYPE: nucleic acid
```

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..789

(D) OTHER INFORMATION: / Ceres Seq. ID 1578692

	(-,		· ·	=		
(xi) SE	EQUENCE DESC	CRIPTION: SE	EQ ID NO:390)3:		
aagagccaac	agagcaacgc	ccaqqcacac	acgacacgaa	ccargcagcc	agccgcggag	60
ggaggaaccc	tagcggaaca	gatgacgaca	gcgcgctacc	ggtgacgggg	gatacggcgg	120
catcotccc	tcctccatcc	ccaacacaac	aacacaacaa	ccggcctgca	ggctgtttga	180
agagetegee	atttaatctc	aatggaagcc	aagtttttcc	gtttcctgaa	actcattaga	240
ayaycccycc	aagcgaggtc	adeggaagee	aaccataaat	tottccttaa	actgggcttc	300
geoggeeea	aagegaggee	agagagccaa	ggccgcgage	tottotactt	caaacccaac	360
agccatgagg	tgcagttcac	egeteeteea	getgteegeg	arttaggggg	caccatcaa	420
ataatctgct	gcaccggcat	cgataaggac	agggrgcacc	agttegetgg	cyccattegg	480
agctctaagg	ctccagaggt	gtacaagggg	aaggggatcc	tgtacattga	egaggitate	
aagctgaagc	ccggaaagaa	gcgaaaaaat	aagtgacgat	ccgaaGgcgt	tacaactttt	540
tctgtctttt	Aaccccattc	ttcgcatttg	tagtgatctg	gatctggggt	ctgctgtgtt	600
atattatata	cttgcgttgt	gctacacaga	tcaccattat	cttaccttta	cctcagctgc	660
atgtaggacc	atgagtggga	ataaqttacc	agtttgttga	tatgagctgg	aacgttgctt	720
tacaaattaa	attggattac	cgagtgggat	attttatttc	aaacttgaag	tctttcaata	780
gattgttgc	accagaacaac	0909-995	5. 5	, , ,		
yactyttyt						

- (2) INFORMATION FOR SEQ ID NO:3904:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 91 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..91
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578693
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3904:

Glu Pro Thr Glu Gln Arg Pro Gly Thr His Asp Thr Asn Xaa Ala Ala 15 5 10 1

Ser Arg Gly Gly Arg Asn Pro Ser Gly Thr Gly Asp Gly Gly Ala Leu 30 20 25

Pro Val Thr Gly Asp Thr Ala Ala Ser Ser Pro Pro Pro Ser Pro Ala 45 40

Arg Arg Arg Ser Ser Arg Pro Ala Gly Cys Leu Lys Ser Ser Pro Phe 55 60

Asn Leu Asn Gly Ser Gln Val Phe Pro Phe Pro Glu Ala Arg Trp Gly 75 70

Arg Leu Gln Ser Glu Val Arg Glu Pro Arg Pro 85

- (2) INFORMATION FOR SEQ ID NO:3905:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 104 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..104
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578694

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3905:

Met Glu Ala Lys Phe Phe Arg Phe Leu Lys Leu Val Gly Val Gly Phe 15 5 10

Lys Ala Arg Ser Glu Ser Gln Gly Arg Glu Leu Phe Leu Lys Leu Gly 30 25 20

Phe Ser His Glu Val Gln Phe Thr Ala Pro Pro Ala Val Arg Val Phe 45 3.5

Cys Phe Lys Pro Asn Ile Ile Cys Cys Thr Gly Ile Asp Lys Asp Arg 60 55

Val His Gln Phe Ala Gly Ala Ile Arg Ser Ser Lys Ala Pro Glu Val

65 70 75 80

Tyr Lys Gly Lys Gly Ile Leu Tyr Ile Asp Glu Val Ile Lys Leu Lys
85 90 95

Pro Gly Lys Lys Arg Lys Asn Lys 100

- (2) INFORMATION FOR SEQ ID NO:3906:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 625 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..625
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578695
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3906:
 gatctggctg cctcggtcga tttctaattc tcctcgcgag cccaaaccct aaacctaaac 60
 ctttcacccg cngccgccg cgccgccgtc gccgccacca catccgtagc gcccagccgc 120
 cggagaagag gagggagca gcaccagca ccatgggtcg cgtccgcacc aagaccgtga 180
 agaagacctc caggcaggtg atcgagaagt actactcccg catgaccctc gacttccaca 240
 ccaacaagaa ggtgctggaa gaggtctcga tcctcccctc gaagcgcctc cgcaacaagg 1300
 ttgccggctt caccaccac ctgatgcgcc gcatccagcg gggGccccgt cctcttctcc
 ggcggctggg cgctacggag gtggtggcgg ctacggcggc ggcggcgck gctggaggga 420
 ctgatgtgt ggcccatcct ggcttcggcc gagttatctt atctatctat agtatcgtgt 480
 taccgttcgc ttctgtcacc gtgttagtgt ccgttctacc ttttggattag gtgttggtac 540
 ccctgttgtt ccctttggtt gctcccgcta tgaaacgaga cgagagaaga atgagcaagg 600
- (2) INFORMATION FOR SEQ ID NO:3907:

tttttgttcg cagctatttt tgtcc

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..175
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578696
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3907:
- Ser Gly Cys Leu Gly Arg Phe Leu Ile Leu Leu Ala Ser Pro Asn Pro 1 5 10 15
- Lys Pro Lys Pro Phe Thr Arg Xaa Arg Arg Arg Arg Arg Arg Arg His 20 25 30
- His Ile Arg Ser Ala Gln Pro Pro Glu Lys Arg Arg Glu Pro Ala Pro 35 40 45
- Ala Thr Met Gly Arg Val Arg Thr Lys Thr Val Lys Lys Thr Ser Arg 50 55 60
- Gln Val Ile Glu Lys Tyr Tyr Ser Arg Met Thr Leu Asp Phe His Thr
 65 70 75 80
- Asn Lys Lys Val Leu Glu Glu Val Ser Ile Leu Pro Ser Lys Arg Leu 85 90 95
- Arg Asn Lys Val Ala Gly Phe Thr Thr His Leu Met Arg Arg Ile Gln
 100 105 110
- Arg Gly Pro Arg Pro Leu Leu Arg Arg Leu Gly Ala Thr Glu Val Val 115 120 125
- Ala Ala Thr Ala Ala Ala Ala Xaa Ala Gly Gly Thr Asp Val Trp Ala 130 135 140
- His Pro Gly Phe Gly Arg Val Ile Leu Ser Ile Tyr Ser Ile Val Leu 145 150 155 160
- Pro Phe Ala Ser Val Thr Val Leu Val Ser Val Leu Pro Leu Asp

175 170 165 (2) INFORMATION FOR SEQ ID NO:3908: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 125 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..125 (D) OTHER INFORMATION: / Ceres Seq. ID 1578697 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3908: Met Gly Arg Val Arg Thr Lys Thr Val Lys Lys Thr Ser Arg Gln Val 10 5 Ile Glu Lys Tyr Tyr Ser Arg Met Thr Leu Asp Phe His Thr Asn Lys 25 20 Lys Val Leu Glu Glu Val Ser Ile Leu Pro Ser Lys Arg Leu Arg Asn 40 Lys Val Ala Gly Phe Thr Thr His Leu Met Arg Arg Ile Gln Arg Gly 60 55 Pro Arg Pro Leu Leu Arg Arg Leu Gly Ala Thr Glu Val Val Ala Ala 75 70 Thr Ala Ala Ala Ala Xaa Ala Gly Gly Thr Asp Val Trp Ala His Pro 90 Gly Phe Gly Arg Val Ile Leu Ser Ile Tyr Ser Ile Val Leu Pro Phe 100 105 110 Ala Ser Val Thr Val Leu Val Ser Val Leu Pro Leu Asp 120 (2) INFORMATION FOR SEQ ID NO:3909: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 102 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..102 (D) OTHER INFORMATION: / Ceres Seq. ID 1578698 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3909: Met Thr Leu Asp Phe His Thr Asn Lys Lys Val Leu Glu Glu Val Ser 10 Ile Leu Pro Ser Lys Arg Leu Arg Asn Lys Val Ala Gly Phe Thr Thr 25 His Leu Met Arg Arg Ile Gln Arg Gly Pro Arg Pro Leu Leu Arg Arg 40 45 Leu Gly Ala Thr Glu Val Val Ala Ala Thr Ala Ala Ala Ala Xaa Ala 60 55 Gly Gly Thr Asp Val Trp Ala His Pro Gly Phe Gly Arg Val Ile Leu 75 70 Ser Ile Tyr Ser Ile Val Leu Pro Phe Ala Ser Val Thr Val Leu Val 85 90 Ser Val Leu Pro Leu Asp 100 (2) INFORMATION FOR SEQ ID NO:3910: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 592 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..592
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578699
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3910: acacacacca togtoctoto otttgccago geogeogaac cegecaccag cettetecca 60 tectegaage aeggaagget eecagaagga geteteacet egeageeate tetggeaegt 120 ccgtccttct tctccctcgg tccctcccct tctccacagc tatcggattg gcgttggagt 180 ggagatcgac ccgggctcgg aattcccttc gttggtaagg aaccctaatt tggtcagatg 240 300 ggatttccaa cttcgacaaa gcccgcgagg tcgatcgatc tcagttgacg cgagggattg gaaaactaag ttgcgggtgt agttaatttt ctaggaagat tggggtttca gctcaaactc ccatgctcga cgctgaggac gaccCtggcg ggagatgacg aggatcttcg tgcagcgcgg gaccgccggc tectegteca geteeggeeg eteggacaeg eagecagtge ageeggeage 480 agctgcccgg gaggaggagt tgccgctgca acctcaacca cagctgccgg agctattggc 540 catagatgat acaactgata atttaaatga gggcagcgag aatatcagca at
- (2) INFORMATION FOR SEQ ID NO:3911:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 75 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..75
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578700
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3911:
- Thr His Thr Ile Val Leu Ser Phe Ala Ser Ala Ala Glu Pro Ala Thr 1 5 10 15

Ser Leu Leu Pro Ser Ser Lys His Gly Arg Leu Pro Glu Gly Ala Leu
20 25 30

Thr Ser Gln Pro Ser Leu Ala Arg Pro Ser Phe Phe Ser Leu Gly Pro 35 40 45

Ser Pro Ser Pro Gln Leu Ser Asp Trp Arg Trp Ser Gly Asp Arg Pro 50 55 60

- Gly Leu Gly Ile Pro Phe Val Gly Lys Glu Pro 75
- (2) INFORMATION FOR SEQ ID NO:3912:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 106 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..106
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578701
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3912:
- His Thr Pro Ser Ser Ser Pro Leu Pro Ala Pro Pro Asn Pro Pro Pro 1 1 15
- Ala Phe Ser His Pro Arg Ser Thr Glu Gly Ser Gln Lys Glu Leu Ser 20 25 30
- Pro Arg Ser His Leu Trp His Val Arg Pro Ser Ser Pro Ser Val Pro
- Pro Leu Leu His Ser Tyr Arg Ile Gly Val Gly Val Glu Ile Asp Pro 50 55 60
- Gly Ser Glu Phe Pro Ser Leu Val Arg Asn Pro Asn Leu Val Arg Trp 65 70 75 80
- Asp Phe Gln Leu Arg Gln Ser Pro Arg Gly Arg Ser Ile Ser Val Asp

95 85 Ala Arg Asp Trp Lys Thr Lys Leu Arg Val 105 100 (2) INFORMATION FOR SEQ ID NO:3913: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 71 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..71 (D) OTHER INFORMATION: / Ceres Seq. ID 1578702 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3913: Thr His His Arg Pro Leu Leu Cys Gln Arg Arg Arg Thr Arg His Gln 10 5 Pro Ser Pro Ile Leu Glu Ala Arg Lys Ala Pro Arg Arg Ser Ser His 30 25 Leu Ala Ala Ile Ser Gly Thr Ser Val Leu Leu Leu Pro Arg Ser Leu 45 40 Pro Phe Ser Thr Ala Ile Gly Leu Ala Leu Glu Trp Arg Ser Thr Arg 55 Ala Arg Asn Ser Leu Arg Trp 70 (2) INFORMATION FOR SEQ ID NO:3914: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 1051 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..1051 (D) OTHER INFORMATION: / Ceres Seq. ID 1578703 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3914: gagccaccaa gagatccacg aatataccca tcccattccc cacaaggctc cgtcccttcg 60 geggeggega tgtetetece eeetrgeeeg geggaeagtg gegeeggeae eggagaegae 120 tggttcctcg actgcrgcat cctcgacgac ctgcccgccg cggcctgcgg ggccttcccg 180 tgggacgcgt ccccgtcgtc ttccaacccc agtgtggaag tgggcagcta tgtaaacgcc 240 aatgatgcat tcaaggagcc caatgatgtc ttcaaggagc ctggcagcag taaacgttta 300 cggtcaggat ccagtgatat gccaacatct aaagcttgca gggaaagaat gaggaggaac 360 aagctgaatg acaggtttct tgaactgggg tctgcattag aacctgggaa gccagtgaaa 420 gctgacaaag ctgccatccC taagcgatgc tactcgcatg gttattcagc tccgttcaga 480 atcacagcaa ctgaaggaga ctaatggcag cctcgaagaa aagattaaag aactaaaggc 540 cgagaaggac gagttcgcga cgagaagcag aaactgaaac tggagaagga gagtctagag 600 caccagatga agetgatgge ateggeteca gectacatge eccateegae ectgatgeeg 660 gegeettteg eccaggegee ectaacteea tteeatgeee agggeeaage tgeagggeag 720 aagctgatga tgcccttcgt cggctaccca gggtacccaa tgtggcagtt catgccgcct 780 tcagaggtcg acacctcgaa ggacagcgag gcgtgccctc ctgtcgcatg atcaccttga 840 tggggctggt cctgctcaca ccatgtggat tagccgcaac tagttgtcgt tgtcgatcca 900 ttgatggggt ataactgatg ttcttaggct atctccagca gcctctctat cctattctct 960 atcttactcc ctattttaaa ttttactctg taaacagtac agtctatagt gtaagacaat 1020 gttttgcatg tttatatcca cgccttgctg g (2) INFORMATION FOR SEQ ID NO:3915:

- - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 167 amino acids (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..167
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578704
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3915:
- Glu Pro Pro Arg Asp Pro Arg Ile Tyr Pro Ser His Ser Pro Gln Gly 10
- Ser Val Pro Ser Ala Ala Ala Met Ser Leu Pro Pro Xaa Pro Ala Asp 25 20
- Ser Gly Ala Gly Thr Gly Asp Asp Trp Phe Leu Asp Cys Xaa Ile Leu 40
- Asp Asp Leu Pro Ala Ala Ala Cys Gly Ala Phe Pro Trp Asp Ala Ser 55
- Pro Ser Ser Ser Asn Pro Ser Val Glu Val Gly Ser Tyr Val Asn Ala 75 70
- Asn Asp Ala Phe Lys Glu Pro Asn Asp Val Phe Lys Glu Pro Gly Ser 90 85
- Ser Lys Arg Leu Arg Ser Gly Ser Ser Asp Met Pro Thr Ser Lys Ala 105 110
- Cys Arg Glu Arg Met Arg Arg Asn Lys Leu Asn Asp Arg Phe Leu Glu 115 120 125
- Leu Gly Ser Ala Leu Glu Pro Gly Lys Pro Val Lys Ala Asp Lys Ala 130 135 140
- Ala Ile Pro Lys Arg Cys Tyr Ser His Gly Tyr Ser Ala Pro Phe Arg 145 150 155
- Ile Thr Ala Thr Glu Gly Asp 165
- (2) INFORMATION FOR SEQ ID NO:3916:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 144 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..144
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578705
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3916:
- Met Ser Leu Pro Pro Xaa Pro Ala Asp Ser Gly Ala Gly Thr Gly Asp 10 5
- Asp Trp Phe Leu Asp Cys Xaa Ile Leu Asp Asp Leu Pro Ala Ala Ala 25
- Cys Gly Ala Phe Pro Trp Asp Ala Ser Pro Ser Ser Ser Asn Pro Ser 45 40
- Val Glu Val Gly Ser Tyr Val Asn Ala Asn Asp Ala Phe Lys Glu Pro 55 Asn Asp Val Phe Lys Glu Pro Gly Ser Ser Lys Arg Leu Arg Ser Gly
- 75 7.0
- Ser Ser Asp Met Pro Thr Ser Lys Ala Cys Arg Glu Arg Met Arg Arg 90 85 Asn Lys Leu Asn Asp Arg Phe Leu Glu Leu Gly Ser Ala Leu Glu Pro
- 110 100 105 Gly Lys Pro Val Lys Ala Asp Lys Ala Ala Ile Pro Lys Arg Cys Tyr
- 125 120 Ser His Gly Tyr Ser Ala Pro Phe Arg Ile Thr Ala Thr Glu Gly Asp 140
- (2) INFORMATION FOR SEQ ID NO:3917:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 991 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..991
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578737
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3917: aaaaatcgaa tegageeeat eeateteeat tteegeegee geegeegeeg agagaeeeea accecaceca tecaceacea tgtggegeeg cetecacace etageeeeeg eettgegeag 120 ggctaccgcc gccgccgccg gggcccctgc ggcgtccgcc tcctctgcag cccgcgccqc 180 240 ceegetetee teggeggeeg eegettteeg eegeaceage eegeteetet eaggggaeaa 300 gccggcgagt gtggaggacg tcatgcccat cgccacgggg ctcgagcggg aggagctgga ggccgagctc aaggggaaga agcggtttga catggatccc ctggtcggcc ccttcggtac 360 caaggaggaa ccatctgtag ttgagtccta ctataacaag cggatagtcg gctgccctgg 420 tggtgaggga gaggatgaac acgatgttgt atggttctgg ttgaaaaaag atgagccgca 480 tgagtgtcca gtctgctcgc aatactttgt gcttaaggtc attggtgatG ggtggtgatc 540 cagatggtca tgacgatgaa gatgatggac atcactaagg atgccttgtg gttctgaaaa 600 taagaatttg gtgaggcaga tgaatccaat acacttettt ttetagaace agactgetee 660 720 acggcatcct tgtttatgaa aagacagttg gccatcaagc aggtggtagt tttcacctag gtattttgtc caaacaaaag ctgtttgaga tttgaccctt gcgtttcttt aagagcatcg 780 tcgaataaaa gatgactgca gtcagattgc tttcttttga tacctcatat tggcccatcg 840 900 ggtgtgatgg acatgtaata ttcagtaatg gaacagcccc atttctatgc ttagcgtgct 960 gggaattttg caaaaggcct cctatatcat tgacgagttt taagccagag tttgatgatc caacatgttt atgaccattg ttttaatagc c
- (2) INFORMATION FOR SEQ ID NO:3918:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 109 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..109
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578738
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3918:

Lys Asn Arg Ile Glu Pro Ile His Leu His Phe Arg Arg Arg Arg 10 15

Arg Glu Thr Pro Thr Pro Pro Ile His His His Val Ala Pro Pro Pro 20 25 30

His Pro Ser Pro Arg Leu Ala Gln Gly Tyr Arg Arg Arg Arg Gly 35 40 45

Pro Cys Gly Val Arg Leu Leu Cys Ser Pro Arg Arg Pro Ala Leu Leu
50 55 60

Gly Gly Arg Arg Phe Pro Pro His Gln Pro Ala Pro Leu Arg Gly Gln 65 70 75 80

Ala Gly Glu Cys Gly Gly Arg His Ala His Arg His Gly Ala Arg Ala 85 90 95

- Gly Gly Ala Gly Gly Arg Ala Gln Gly Glu Glu Ala Val
- (2) INFORMATION FOR SEQ ID NO:3919:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 178 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..178
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578739

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3919:

Lys Ile Glu Ser Ser Pro Ser Ile Ser Ile Ser Ala Ala Ala Ala 10 5

Glu Arg Pro Gln Pro His Pro Ser Thr Thr Met Trp Arg Arg Leu His 20 25

Thr Leu Ala Pro Ala Leu Arg Arg Ala Thr Ala Ala Ala Gly Ala 35 40

Pro Ala Ala Ser Ala Ser Ser Ala Ala Arg Ala Ala Pro Leu Ser Ser 55

Ala Ala Ala Ala Phe Arg Arg Thr Ser Pro Leu Leu Ser Gly Asp Lys 75 70

Pro Ala Ser Val Glu Asp Val Met Pro Ile Ala Thr Gly Leu Glu Arg 85

Glu Glu Leu Glu Ala Glu Leu Lys Gly Lys Lys Arg Phe Asp Met Asp 105 110 100

Pro Leu Val Gly Pro Phe Gly Thr Lys Glu Glu Pro Ser Val Val Glu 120

Ser Tyr Tyr Asn Lys Arg Ile Val Gly Cys Pro Gly Gly Glu Gly Glu 130 135 140

Asp Glu His Asp Val Val Trp Phe Trp Leu Lys Lys Asp Glu Pro His 145 150 155

Glu Cys Pro Val Cys Ser Gln Tyr Phe Val Leu Lys Val Ile Gly Asp 170 165

Gly Trp

- (2) INFORMATION FOR SEQ ID NO:3920:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 152 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..152
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578740
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3920:

Met Trp Arg Arg Leu His Thr Leu Ala Pro Ala Leu Arg Arg Ala Thr 10

Ala Ala Ala Gly Ala Pro Ala Ala Ser Ala Ser Ser Ala Ala Arg 20 25

Ala Ala Pro Leu Ser Ser Ala Ala Ala Ala Phe Arg Arg Thr Ser Pro 40

Leu Leu Ser Gly Asp Lys Pro Ala Ser Val Glu Asp Val Met Pro Ile 60 55

Ala Thr Gly Leu Glu Arg Glu Glu Leu Glu Ala Glu Leu Lys Gly Lys 7.5 70

Lys Arg Phe Asp Met Asp Pro Leu Val Gly Pro Phe Gly Thr Lys Glu 90 85

Glu Pro Ser Val Val Glu Ser Tyr Tyr Asn Lys Arg Ile Val Gly Cys 110 105

Pro Gly Gly Glu Gly Glu Asp Glu His Asp Val Val Trp Phe Trp Leu 120 125

Lys Lys Asp Glu Pro His Glu Cys Pro Val Cys Ser Gln Tyr Phe Val 135

Leu Lys Val Ile Gly Asp Gly Trp 150

145

- (2) INFORMATION FOR SEQ ID NO:3921:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 865 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..865
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578744
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3921: gttggacatc gcggcctcac gcgttcgacg tgcgcgcgtg cgttactcgt cgtcgtcggg ccgcggcgct tgttgcatca cactgtagta tatagaacga gccatccacg cacataaagc tacagcatct gctcgatcgt ctagcttgga cggtggaccg agagaccagc cagctagatg 180 240 gegegeaggg eggteggegt tetaetggee gtggeegege teetegegge ggegaeggeg agggeggegg aegaegaega caagaegeag eectggeagt getteaagte atgeteeaga rgctgccacc accaccacga ccacgaccac gacaacggcg ctgctgccgt ggcggacttc 360 ctctccgggg ccgccgccaa ggtctccgcc gccgtcaccc gcgagtgcaa gaacaacagc 420 tgccatgaca acgegtgett caaggacetg eeggecatea eetaeeegea gtgegeeate 480 540 gccacctgcc Ctcagccatc cgcaccatag cagaaagaaa acggcgtgct tgaaggactg ctgcgagaag tgcttcatca atggcccacc tgcgcctggc ccacctgcgc ctggcccgcc tgtgcctggc ccacctgcgc ctggcccgcc tgctcctggt cccagcccga cgccaccatc 660 tccgccaaat taagcccatg ttgcatggat gctcttggta cacatgcatg aagtagtaga 720 780 gagcaacggt caacttactc cttatattcc cataataata aaatacttag gagtacttac ttcaaaaaaa gaaggatctc atgactgtaa ccgaagtgac attttctctt gagttggggt 840
- (2) INFORMATION FOR SEQ ID NO:3922:

qtaacataaa cccagcacca aagcc

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 110 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..110
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578745
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3922:
- Ala Ala Ala Thr Ala Arg Ala Ala Asp Asp Asp Asp Lys Thr Gln Pro 20 25 30
- Trp Gln Cys Phe Lys Ser Cys Ser Arg Xaa Cys His His His Asp 35 40 45
- His Asp His Asp Asn Gly Ala Ala Ala Val Ala Asp Phe Leu Ser Gly 50 55 60
- Ala Ala Ala Lys Val Ser Ala Ala Val Thr Arg Glu Cys Lys Asn Asn 65 70 75 80
 Ser Cys His Asp Asn Ala Cys Phe Lys Asp Leu Pro Ala Ile Thr Tyr
- Pro Gln Cys Ala Ile Ala Thr Cys Pro Gln Pro Ser Ala Pro
 100 105 110
- (2) INFORMATION FOR SEQ ID NO:3923:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 82 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..82
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578746
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3923:

Met Thr Thr Arg Ala Ser Arg Thr Cys Arg Pro Ser Pro Thr Arg Ser 1 5 10 15

Ala Pro Ser Pro Pro Ala Leu Ser His Pro His His Ser Arg Lys Lys 20 25 30

Thr Ala Cys Leu Lys Asp Cys Cys Glu Lys Cys Phe Ile Asn Gly Pro 35 40 45

Pro Ala Pro Gly Pro Pro Ala Pro Gly Pro Pro Val Pro Gly Pro Pro 50 55 60

Ala Pro Gly Pro Pro Ala Pro Gly Pro Ser Pro Thr Pro Pro Ser Pro 65 70 75 80
Pro Asn

- (2) INFORMATION FOR SEQ ID NO:3924:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 857 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..857
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578754
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3924:

acageegeae ageegeegee getecateea ectetecaea ecatetgaeg etgettecae 60 cgaggtetec aaggeteact ceteaceage ttetgetete teeeteetea tetetgetet 120 getetggace gttaactete cageteecee tegeteegtt eeetteegee caaateaceg 180 ggaccaccac egecttette aagateggeg ggegggeace ggeeggegat gacatecace 240 gtcaccacaa ccgttgggtg cggggggctc cccgtccgcc cgttgtcgac agcgaccaga 300 ggacgcccac gcagatgcCg ccgtccgagc ccaggccgcg ggagcgratg cctccaatga 360 taagtcagtg gaggtcatgc gcaagttctc cgagcagtac gcccgccgct ccaacacttt 420 cttctgcgcc gacaagacag tcactgccgt cgtcatcaag ggacttgctg atcacaggga 480 tactcttgga gctcctctat gcccttgtag gcattatgat gacaaagctg cggaggtagc 540 acaaggattt tggaattgcc catgtgtccc catgcgtgag aggaaggaat gccactgtat 600 gettittett acteeegata atgaetttge tgggaaggat eaggttatet eettegagga 660 gatcaaagag gcgacatcga agttctaagc ccttgtattt gtcacggagt gtttacttga 720 cagctaattt tttatatgta tatgtactta agtagcatct ataagatatg ccatcaggaa 780 aattttcata aaatgtgcag taaacagcac ttcgcaaggc tgccgatcat ataagncncg 840 ttcggccttt ttattqc

- (2) INFORMATION FOR SEQ ID NO:3925:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 178 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..178
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578755
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3925:

Ser Arg Thr Ala Ala Ala Ala Pro Ser Thr Ser Pro His His Leu Thr 1 5 10 15

Leu Leu Pro Pro Arg Ser Pro Arg Leu Thr Pro His Gln Leu Leu Leu 20 25 30

Ser Pro Ser Ser Ser Leu Leu Cys Ser Gly Pro Leu Thr Leu Gln Leu 35 40 45

```
Pro Leu Ala Pro Phe Pro Ser Ala Gln Ile Thr Gly Thr Thr Ala
                      55
Phe Phe Lys Ile Gly Gly Arg Ala Pro Ala Gly Asp Asp Ile His Arg
                                    75
                  70
His His Asn Arg Trp Val Arg Gly Ala Pro Arg Pro Pro Val Val Asp
              85
                                 90
Ser Asp Gln Arg Thr Pro Thr Gln Met Pro Pro Ser Glu Pro Arg Pro
                                               110
                             105
          100
Arg Glu Xaa Met Pro Pro Met Ile Ser Gln Trp Arg Ser Cys Ala Ser
                        120
                                            125
Ser Pro Ser Ser Thr Pro Ala Ala Pro Thr Leu Ser Ser Ala Pro Thr
                     135
                                       140
Arg Gln Ser Leu Pro Ser Ser Ser Arg Asp Leu Leu Ile Thr Gly Ile
     150 155
Leu Leu Glu Leu Leu Tyr Ala Leu Val Gly Ile Met Met Thr Lys Leu
                                 170
              165
Arg Arg
```

- (2) INFORMATION FOR SEQ ID NO:3926:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 103 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..103
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578756
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3926:

Met Arg Lys Phe Ser Glu Gln Tyr Ala Arg Arg Ser Asn Thr Phe Phe 1 5 10 15

Cys Ala Asp Lys Thr Val Thr Ala Val Val Ile Lys Gly Leu Ala Asp 20 25 30

His Arg Asp Thr Leu Gly Ala Pro Leu Cys Pro Cys Arg His Tyr Asp 35 40 45

Asp Lys Ala Ala Glu Val Ala Gln Gly Phe Trp Asn Cys Pro Cys Val 50 55 60

Pro Met Arg Glu Arg Lys Glu Cys His Cys Met Leu Phe Leu Thr Pro 65 70 75 80

Asp Asn Asp Phe Ala Gly Lys Asp Gln Val Ile Ser Phe Glu Glu Ile 85 90 95

Lys Glu Ala Thr Ser Lys Phe 100

- (2) INFORMATION FOR SEQ ID NO:3927:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 713 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..713
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578759
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3927:

acactatata accttetet ttegeogtge teegatttga cacacetee aaaccetaca 60 cteeeggegg eggeggegge ggegeasage ggeageagea teegaagatg gtgaagttee 120 teaageeegg eaaggeegtt atceteetee agggeegCtt egeeggeagg aaggeagtta tegtgegegt gttegaggag ggeaceegeg acegeeeta tggeeactge etegtegeag geetegeeaa gtaeceaaag aaggtgatee geaaggaete egeeaagaag actgegaaga 300

agtcgcgcgt caagtgcttc atcaagctcg tcaacttcac tcacctcatg cccacccgct acacccctcga cgtcgattc aaggatgtcg ccaccggtgg gcccgacgca ctctctaccc 420 acgacaagaa ggtcgccgcc tgcaagacgg ccaaagcggg ccttgaggag aggttcaaga 480 ccggcaagaa caggtggttc tttaccaaGc tccgcttcta gatgctcggc ctcccgaata 540 gtcctgcttt agctgtcgat ttgttgtatc ggacacactc catctctgtt ttcgtattac catgatatt tcgtgTttta gtcctggggc tctcagagat aaatttgcta agatatgccg ttgttgtgtt acatgtttc gtgataggtc tggttaaaat tttgttctgt ttc (2) INFORMATION FOR SEQ ID NO:3928:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 137 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..137
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578760
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3928:

Met Val Lys Phe Leu Lys Pro Gly Lys Ala Val Ile Leu Leu Gln Gly
1 5 10 15

Arg Phe Ala Gly Arg Lys Ala Val Ile Val Arg Val Phe Glu Glu Gly 20 25 30

Thr Arg Asp Arg Pro Tyr Gly His Cys Leu Val Ala Gly Leu Ala Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Pro Lys Lys Val Ile Arg Lys Asp Ser Ala Lys Lys Thr Ala Lys 50 55 60

Lys Ser Arg Val Lys Cys Phe Ile Lys Leu Val Asn Phe Thr His Leu 65 70 75 80

Met Pro Thr Arg Tyr Thr Leu Asp Val Asp Phe Lys Asp Val Ala Thr 85 90 95

Gly Gly Pro Asp Ala Leu Ser Thr His Asp Lys Lys Val Ala Ala Cys
100 105 110

Lys Thr Ala Lys Ala Arg Leu Glu Glu Arg Phe Lys Thr Gly Lys Asn 115 120 125

Arg Trp Phe Phe Thr Lys Leu Arg Phe 130 135

- (2) INFORMATION FOR SEQ ID NO:3929:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 889 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..889
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578777
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3929:

catgaggatg gaaactttta ccctggaact ggagctgctc atgaggtggg agttcttgat 60 ggtcaaggat tctcagttaa tataccttgg agccgtggtg gtgttggaga tgatgactac 120 atctttgctt ttcagactgt ggtgcttcca atagcttcag agtttgccgc agacatcact 180 ataatatctg caggattcga tgcagctaga ggtgaccctc tgggttgttg tgacgtcact 240 ccaactggat actcttggat gacatccctg ctagctggtt cctcaaatgg aagattgttg 300 gtgatacttg agggaggata caatctccgg tcgatatcct catcagctac tgaagttgtt 360 aaggtcctac ttggggaggg tcccaatcgt gcttcatttg tagtttcacc atcaaaagag 420 gccttgcgta ctgtttctca agtcctgaag attcaacaac aattttggcc agttttaggt 480 540 ccaacatacg catcactaca ggcgcaGcag gggtcggttt cttccaatca tagcaatgag ctgaagaaaa ggaagcgttc aggaggagga ccagggccct tctggtggaa gatgggaagc 600 aaaaggette tatacgaage gettattgag eetegeagee gteegaggaa aeteaagggg 660 tcaactggtt cagcagcgcc ttagatgtgg gcagtttgct ggccgttgat cttctagaca 720 tgaacagggt agctcgctga ccgcgtttcc tcaagcagag taggctgcgt ttacgtagaa 780 aacctacttt tggctggtta cttgcatgat ggtcgaccgt ttcagatgga gtttgacagc 840 aaacccgttg tgttaaccat gcgtggcgta tcagccgatg tttcatgcc

(2) INFORMATION FOR SEQ ID NO:3930:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 227 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..227
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578778
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3930:

His Glu Asp Gly Asn Phe Tyr Pro Gly Thr Gly Ala Ala His Glu Val 1 5 10 15

Gly Val Leu Asp Gly Gln Gly Phe Ser Val Asn Ile Pro Trp Ser Arg

Gly Gly Val Gly Asp Asp Asp Tyr Ile Phe Ala Phe Gln Thr Val Val

Leu Pro Ile Ala Ser Glu Phe Ala Ala Asp Ile Thr Ile Ile Ser Ala 50 55 60

Gly Phe Asp Ala Ala Arg Gly Asp Pro Leu Gly Cys Cys Asp Val Thr 70 75 80

Pro Thr Gly Tyr Ser Trp Met Thr Ser Leu Leu Ala Gly Ser Ser Asn 85 90 95

Gly Arg Leu Leu Val Ile Leu Glu Gly Gly Tyr Asn Leu Arg Ser Ile 100 105 110

Ser Ser Ser Ala Thr Glu Val Val Lys Val Leu Leu Gly Glu Gly Pro 115 120 125

Asn Arg Ala Ser Phe Val Val Ser Pro Ser Lys Glu Ala Leu Arg Thr 130 135 140

Val Ser Gln Val Leu Lys Ile Gln Gln Gln Phe Trp Pro Val Leu Gly
145 150 155 160

Pro Thr Tyr Ala Ser Leu Gln Ala Gln Gln Gly Ser Val Ser Ser Asn 165 170 175

His Ser Asn Glu Leu Lys Lys Arg Lys Arg Ser Gly Gly Pro Gly
180
185
190

Pro Phe Trp Trp Lys Met Gly Ser Lys Arg Leu Leu Tyr Glu Ala Leu 195 200 205

Ile Glu Pro Arg Ser Arg Pro Arg Lys Leu Lys Gly Ser Thr Gly Ser 210 215 220

Ala Ala Pro

225

- (2) INFORMATION FOR SEQ ID NO:3931:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 141 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..141
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578779

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3931:

Leu Glu Gly Gly Tyr Asn Leu Arg Ser Ile Ser Ser Ser Ala Thr Glu 20 25 30

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
Val Val Lys Val Leu Leu Gly Glu Gly Pro Asn Arg Ala Ser Phe Val
                            40
Val Ser Pro Ser Lys Glu Ala Leu Arg Thr Val Ser Gln Val Leu Lys
                                             60
                        55
Ile Gln Gln Gln Phe Trp Pro Val Leu Gly Pro Thr Tyr Ala Ser Leu
                                         75
                    70
Gln Ala Gln Gln Gly Ser Val Ser Ser Asn His Ser Asn Glu Leu Lys
                                     90
                85
Lys Arg Lys Arg Ser Gly Gly Gly Pro Gly Pro Phe Trp Trp Lys Met
                                                     110
            100
                                 105
Gly Ser Lys Arg Leu Leu Tyr Glu Ala Leu Ile Glu Pro Arg Ser Arg
                            120
Pro Arg Lys Leu Lys Gly Ser Thr Gly Ser Ala Ala Pro
                        135
(2) INFORMATION FOR SEQ ID NO:3932:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 810 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
```

- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..810
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578782
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3932: 60 gatggatatt tgcagattag tctacacgag tcacgatagg aggaagactg gaagaggagg cgagcacgtt tgcggtgccc accctcaccg tccactccaa aaccccaaat ccagttccgt 120 tccaatcgcc gagaagggca gcaaagggga gaaaaaaaag gaaaacgatr gmngcrgccg 180 gcggcgagaa cagcggcgcg gngcgaggc gagggcgagt tttacctgcg ctactacgtg 240 ggtcacaagg gcaagttcgg gcacgagttc ctcgagttcg agttccgccc cgacqgcaag 300 ctccgCtacg ccaacaactc caactacaag aacgacacca tgatccgcaa ggaggtcttc 360 gtctcgccct ccgtcctccg cgaggccagg aggatcatcc aggagtccga catcatgaag 420 gaggacgaca gcaactggcc cgagcccgac cgcatcggcc gccaggagct cgagatcgtc 480 atgggcaacg agcacatttc attcaccact tccaagatcg gctccctcgt cgatgtccag 540 tecageaagg acceggaggg ceteeggate ttetactace ttgtecagga tetgaagtgt 600 ttcgtgttct cgctcatcaa ccttcacttc aagatcaagc caatccagtc ttgagctcca 660 teccaageet teatgtaget ggtttgtgag actgegagtg ttttgagaga gaacetttta 720 accatgtaag atgatgttga tattgtggac gatgcgcgcg atcgaccctg tgtggtgcac 780 ttagtggaag tggaaccccc ctttgcattt
- (2) INFORMATION FOR SEQ ID NO:3933:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 113 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..113
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578783
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3933:
- Met Asp Ile Cys Arg Leu Val Tyr Thr Ser His Asp Arg Arg Lys Thr 15 10 5
- Gly Arg Gly Gly Glu His Val Cys Gly Ala His Pro His Arg Pro Leu 30 25
- Gln Asn Pro Lys Ser Ser Ser Val Pro Ile Ala Glu Lys Gly Ser Lys 45 40
- Gly Glu Lys Lys Lys Glu Asn Asp Xaa Xaa Xaa Arg Arg Arg Glu Gln 60 55
- Arg Arg Xaa Ala Arg Ala Arg Ala Ser Phe Thr Cys Ala Thr Trp

65 Val Thr Arg Ala Ser Ser Gly Thr Ser Ser Ser Ser Ser Ser Ser Ser Ala 85 Pro Thr Ala Ser Ser Ala Thr Pro Thr Thr Pro Thr Thr Arg Thr Thr Thr 100 Value Valu

Pro

- (2) INFORMATION FOR SEQ ID NO:3934:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 104 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..104
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578785
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3934:

Met Ile Arg Lys Glu Val Phe Val Ser Pro Ser Val Leu Arg Glu Ala 1 5 10 15

Arg Arg Ile Ile Gln Glu Ser Asp Ile Met Lys Glu Asp Asp Ser Asn

Trp Pro Glu Pro Asp Arg Ile Gly Arg Gln Glu Leu Glu Ile Val Met 35 40 45

Gly Asn Glu His Ile Ser Phe Thr Thr Ser Lys Ile Gly Ser Leu Val 50 55 60

Asp Val Gln Ser Ser Lys Asp Pro Glu Gly Leu Arg Ile Phe Tyr Tyr 65 70 75 80

Leu Val Gln Asp Leu Lys Cys Phe Val Phe Ser Leu Ile Asn Leu His 85 90 95

Phe Lys Ile Lys Pro Ile Gln Ser

- (2) INFORMATION FOR SEQ ID NO:3935:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 653 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..653
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578786
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3935:

aagactggcg aaacgcgttg ttttcctctt ttccccaagg caaccaaacc atctcgattc tegactegtg gggaagttte getetereeg gegtegaegg cetagggtte gaggaaegte 120 cgtccgtccg tccggggaag gagcggtagg gaggcggaga tgatcgaggt ggtgctcaac 180 gaccgcctgg ggaagaaggt gcgggtcaag tgcaacgagg acgacaccat cggcgacctc 240 aagaagctgg tggcggcgca gacggggacg cgccccgaga agatccgcat ccagaagtgg 300 tacaacatct acaaggacca catcaccctc aaggactacg aggtccacga cggcatgggc 360 ctcgagetet actacaactg ageegeegee ecteteteee tetegteagg ttggtetgaa 420 ttctgaagtc atgggtgcaa ttCkcttcgc ggtgatctct taagctcatc acatatataa 480 aagcaacctc agtgggctat gtaagacatg gcgtgccaaa ctatcagtga ccactgacag 540 ctttgcaata cgttgttgta tggtcaacct gcaaacttgg tgtactgcta ctcgtactat 600 aaataacata gggttttaac cttggttgtg gtaatggtca tcttttctca ttc

- (2) INFORMATION FOR SEQ ID NO:3936:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 53 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..53
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578787
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3936:
- His Leu Asp Ser Arg Leu Val Gly Lys Phe Arg Ser Xaa Arg Arg Arg 20 25 30
- Arg Pro Arg Val Arg Gly Thr Ser Val Arg Pro Ser Gly Glu Gly Ala 35 40 45
- Val Gly Arg Arg Arg 50
- (2) INFORMATION FOR SEQ ID NO:3937:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 48 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..48
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578788
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3937:
- Asp Trp Arg Asn Ala Leu Phe Ser Ser Phe Pro Gln Gly Asn Gln Thr 1 5 10 15
- Ile Ser Ile Leu Asp Ser Trp Gly Ser Phe Ala Leu Xaa Gly Val Asp 20 25 30
- Gly Leu Gly Phe Glu Glu Arg Pro Ser Val Arg Pro Gly Lys Glu Arg 35 40 45
- (2) INFORMATION FOR SEQ ID NO:3938:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 73 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..73
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578789
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3938:
- Met Ile Glu Val Val Leu Asn Asp Arg Leu Gly Lys Lys Val Arg Val 1 5 10 15
- Lys Cys Asn Glu Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Val Ala
 20 25 30
- Ala Gln Thr Gly Thr Arg Pro Glu Lys Ile Arg Ile Gln Lys Trp Tyr 35 40 45
- Asn Ile Tyr Lys Asp His Ile Thr Leu Lys Asp Tyr Glu Val His Asp 50 55 60
- Gly Met Gly Leu Glu Leu Tyr Tyr Asn 70
- (2) INFORMATION FOR SEQ ID NO:3939:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 713 base pairs
 - (B) TYPE: nucleic acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..713
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578793
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3939: gctagcggtc cgcacccact cacccgttgc ctccaaactc atttctcccg agcgccgccg 60 cgagcctctg ttccagcttc gttcatggct tccctcaccg gatccgctct ctcctttgcg 120 aggcccgtca aggcaatcag cattaagtct gtctctttCc tctggtctaa ggaaggataa 180 tgtagccttc cgcttgcagc cagtgccaca aagattcgct gtctgctgtc ctgctaaaaa 240 300 ggagactgtg gatcgggttt gtgatattgt caagaagcag cttgcacttc ctgagggcac tgaggtctgt ggctcctcta agtttcaaga cctcggtgct gattcgttgg acactgttga 360 gattgttatg ggccttgagg aggctttcaa gatcactgta gaggagtcga gcgcgcagtc 420 aatcgcaact gtggaagatg ctgctaatct catcgacgaa cttgttgcag gagcagcaaa 480 atcgtgttaa actcgtggtc gtattgcgtt gggtgctgta ccagggcatc acttgttgtt 540 600 ctatgccccc ttccctacta gattttcttt tctaccctgg gcctggagag atgtttctgt 660 catgactgtc attgtggatc tcgcgatatt gttatattga agcttttgtg cttgttcaag aaaagaaaat gttgttgcga tatatatgtt attatattga atttttttt gtc
- (2) INFORMATION FOR SEQ ID NO:3940:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 162 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..162
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578794
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3940:
- 20 25 30
 Pro Asp Pro Leu Ser Pro Leu Arg Gly Pro Ser Arg Gln Ser Ala Leu
- Pro Asp Pro Leu Ser Pro Leu Arg Gly Pro Ser Arg Gin Ser Ala Leu
 35 40 45
- Ser Leu Ser Leu Ser Ser Gly Leu Arg Lys Asp Asn Val Ala Phe Arg 50 55 60
- Leu Gln Pro Val Pro Gln Arg Phe Ala Val Cys Cys Pro Ala Lys Lys 65 70 75 80
- Glu Thr Val Asp Arg Val Cys Asp Ile Val Lys Lys Gln Leu Ala Leu 85 90 95
- Pro Glu Gly Thr Glu Val Cys Gly Ser Ser Lys Phe Gln Asp Leu Gly 100 105 110
- Ala Asp Ser Leu Asp Thr Val Glu Ile Val Met Gly Leu Glu Glu Ala 115 120 125
- Phe Lys Ile Thr Val Glu Glu Ser Ser Ala Gln Ser Ile Ala Thr Val 130 135 140
- Ser Cys
- (2) INFORMATION FOR SEQ ID NO:3941:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 674 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)

- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..674
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578799
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3941: attagtcagc agattgtgaa gaaacagctg tctccaaagc gagaagacga agaaagggga 60 aatcgagaga tgagctacca gagagtccct cccgaggaac cctaccctcc tccaggacat 120 cetegatete aGgegeacce ttacceaccg ceaccagatg tgtaccegee tececetegg 180 ggccatggac atccaccacc accccatggc gtgtacccgc cgccgccgca gggtccttac ccccaccac agcagectec aceggggtae cagggetaet teaacgacca geagegteet tactacccgc cgccgcatgg agagcatcaa cacaaccacc accagggaaa ccagggtagc 360 420 tcctctqqqt tcctcaaagg atgtttggct gctctctctg ctgctgcgtg ctggaggaat gctgcggctg cttctgagac gtgagatgtc cgggaatccg atcgcaagtt atcgtcgcta 480 gcattcggga gcaccccagt tattatcata taatagtaac tgtgcttgta aataatctgg 540 agcagcagtg ttcatgagct cccagccccg catttatatt ctcataattt gtagtacgtt 600 660 ctatgattta tccgaaaata aaggactcta tatatgggat tctaaataag gtatttgcat atttcatqqq attc
- (2) INFORMATION FOR SEQ ID NO:3942:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 147 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..147
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578800
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3942:
- Ile Ser Gln Gln Ile Val Lys Lys Gln Leu Ser Pro Lys Arg Glu Asp

 1 5 10 15

 15 17 Arg Val Pro Pro Glu

Glu Glu Arg Gly Asn Arg Glu Met Ser Tyr Gln Arg Val Pro Pro Glu
20 25 30

Glu Pro Tyr Pro Pro Pro Gly His Pro Arg Ser Gln Ala His Pro Tyr 35 40 45

Pro Pro Pro Pro Asp Val Tyr Pro Pro Pro Pro Arg Gly His Gly His 50 55 60

Pro Pro Pro His Gly Val Tyr Pro Pro Pro Pro Gln Gly Pro Tyr
65 70 75 80

Pro Pro Pro Gln Gln Pro Pro Pro Gly Tyr Gln Gly Tyr Phe Asn Asp
85
90
95

Gln Gln Arg Pro Tyr Tyr Pro Pro Pro His Gly Glu His Gln His Asn 100 105 110

His His Gln Gly Asn Gln Gly Ser Ser Ser Gly Phe Leu Lys Gly Cys 115 120 125

Leu Ala Ala Leu Ser Ala Ala Ala Cys Trp Arg Asn Ala Ala Ala Ala 130 135 140

Ser Glu Thr

145

- (2) INFORMATION FOR SEQ ID NO:3943:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 124 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..124
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578801
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3943:

```
Met Ser Tyr Gln Arg Val Pro Pro Glu Glu Pro Tyr Pro Pro Pro Gly
                                    1.0
His Pro Arg Ser Gln Ala His Pro Tyr Pro Pro Pro Pro Asp Val Tyr
            20
                                25
Pro Pro Pro Pro Arg Gly His Gly His Pro Pro Pro Pro His Gly Val
                            40
Tyr Pro Pro Pro Pro Gln Gly Pro Tyr Pro Pro Pro Gln Gln Pro Pro
Pro Gly Tyr Gln Gly Tyr Phe Asn Asp Gln Gln Arg Pro Tyr Tyr Pro
                    70
                                        75
Pro Pro His Gly Glu His Gln His Asn His His Gln Gly Asn Gln Gly
                85
                                    90
Ser Ser Ser Gly Phe Leu Lys Gly Cys Leu Ala Ala Leu Ser Ala Ala
                                                    110
                                105
           100
Ala Cys Trp Arg Asn Ala Ala Ala Ala Ser Glu Thr
                           120
        115
```

- (2) INFORMATION FOR SEQ ID NO:3944:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 107 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..107
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578802
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3944: Met Cys Thr Arg Leu Pro Leu Gly Ala Met Asp Ile His His Pro

10 5 Met Ala Cys Thr Arg Arg Arg Arg Val Leu Thr Pro His His Ser

30 25

Ser Leu His Arg Gly Thr Arg Ala Thr Ser Thr Thr Ser Ser Val Leu 45 40

Thr Thr Arg Arg Arg Met Glu Ser Ile Asn Thr Thr Thr Arg Glu 60 55

Thr Arg Val Ala Pro Leu Gly Ser Ser Lys Asp Val Trp Leu Leu Ser 75 70

Leu Leu Leu Arg Ala Gly Gly Met Leu Arg Leu Leu Arg Arg Glu 90 8.5

Met Ser Gly Asn Pro Ile Ala Ser Tyr Arg Arg 100 105

- (2) INFORMATION FOR SEQ ID NO:3945:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 923 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..923
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578817
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3945: agaagctcct ccggtcctcc cttctctccg tagaaacatt tcccgacggg tgtttcccac 60 geeggaatgg accageegge accataagee caagattegt ttgatgagtt tgtaegatae 120 tggctctaca gttaggagaa cacatttaat ctaccttcac tagcattcag taatgccttt 180 gcctaaatca gacctggggt cataactctt tagtagagaa ccaagaagat gcaggcatct 240 agggcaaggc ttttcaagga gtacaaggag gtacagcgag agaagtcagc tgaccctgat 300 atccaattaa tatgtgatga ttctaacata ttcaagtgga ctgctcttat caaGggccct 360 tctgaaacac cttatgaagg tggtgtttt caacttgcat tcgcaattcc agagcagtat 420

cctctgctgc ctcctcaagt tcgatttttg accaaaactt tccacccaaa tgtgcatttc 480 aagacaggtg agatttgtct ggatatattg Aaagaatgca tggagCccta tatggaccct 540 600 tcagtctgtt tgtagagcca taattgctct gatggcccac cctgaaccag acagcccact 660 taactgtgat tcaggcaatc tctgcggtcc ggtgatatca gaggctatca atcaatggcc cgcatgtata caaggctggc ggccatgcca aagaaaggtt agccgtaaaa catgtgccag 720 gccaagagcc tattgtccat gcatggctac atgttgtcag gtctgccttg tgctgtctgt 780 atgaactttg tggttcttga ttcatgaaat actaaccgtt cgtgtgttgc gtgtgtct 840 900 ggggtaatga gaggacactc gggttctcga tggtgttggt ctgtgatgta tttagtaata agaaaataaa aaatgatttc tcg

- (2) INFORMATION FOR SEQ ID NO:3946:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..108
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578818
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3946:

Met Gln Ala Ser Arg Ala Arg Leu Phe Lys Glu Tyr Lys Glu Val Gln 1 5 10 15

Arg Glu Lys Ser Ala Asp Pro Asp Ile Gln Leu Ile Cys Asp Asp Ser

Asn Ile Phe Lys Trp Thr Ala Leu Ile Lys Gly Pro Ser Glu Thr Pro

Tyr Glu Gly Gly Val Phe Gln Leu Ala Phe Ala Ile Pro Glu Gln Tyr 50 55 60

Pro Leu Leu Pro Pro Gln Val Arg Phe Leu Thr Lys Thr Phe His Pro 65 70 75 80

Asn Val His Phe Lys Thr Gly Glu Ile Cys Leu Asp Ile Leu Lys Glu 85 90 95

Cys Met Glu Pro Tyr Met Asp Pro Ser Val Cys Leu 100 105

- (2) INFORMATION FOR SEQ ID NO:3947:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 70 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..70
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578819
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3947:

Met Ala His Pro Glu Pro Asp Ser Pro Leu Asn Cys Asp Ser Gly Asn 1 5 10 15

Leu Cys Gly Pro Val Ile Ser Glu Ala Ile Asn Gln Trp Pro Ala Cys 20 25 30

Ile Gln Gly Trp Arg Pro Cys Gln Arg Lys Val Ser Arg Lys Thr Cys 35 40 45

Ala Arg Pro Arg Ala Tyr Cys Pro Cys Met Ala Thr Cys Cys Gln Val 50 55 60

Cys Leu Val Leu Ser Val

70

- (2) INFORMATION FOR SEQ ID NO:3948:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 626 base pairs
 - (B) TYPE: nucleic acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..626
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578834
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3948:

(XI) SECONICE DEDCKILLION. DEG ID MOTORIO.									
gatgcaacca	gaacccatag	ctgacgacac	caccgtgtgg	tcgacaaaat	aaaaaggaga	60			
			atggccgccg			120			
cttctcatcc	tcataacaac	agagaggacg	atgggcaggg	tggtggtgga	agagacgctc	180			
tacttatcac	agagccatgc	cttcaaaggc	gtgtgcctca	gcaacaccaa	ctgcgacaac	240			
gtatgcaaga	cagagaagtt	cacaggegge	gagtgcaaga	tggacggcgt	catgcgcaag	300			
tactactaca	agaaggtotg	ctagggcatg	accggcagca	agNCccccag	ccgtacggct	360			
ggtGtgatcc	agttacacac	catttagaca	cgcggtcatg	ttccqqcttc	toggotttat	420			
t+at+tct+c	tttattataa	taaatagact	ctgttagtca	aatacatttt	agtctgggtc	480			
atacattatt	aattototad	tatattatat	ttRcgcaaCG	cacactatac	ttaacqtaqc	540			
gracycrate	ttagasttag	ataataaaa	ggccaacgat	ttatcttgat	totacaaaaa	600			
			ggccaacgac	ccaccccgac	egeacaaaaa				
aattatatat	atttgtgatg	gtggtc							

- (2) INFORMATION FOR SEQ ID NO:3949:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 84 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..84
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578835
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3949:

Val Leu Val Leu Val Ala Ala Glu Arg Thr Met Gly Arg Val Val
20 25 30

Val Glu Glu Thr Leu Cys Leu Ser Gln Ser His Ala Phe Lys Gly Val 35 40 45

Cys Leu Ser Asn Thr Asn Cys Asp Asn Val Cys Lys Thr Glu Lys Phe 50 55 60

Thr Gly Gly Glu Cys Lys Met Asp Gly Val Met Arg Lys Cys Tyr Cys 65 70 75 80

Lys Lys Val Cys

- (2) INFORMATION FOR SEQ ID NO:3950:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1...77
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578836
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3950:

Met Ala Ala Ala Pro Phe Phe Val Val Leu Leu Val Leu Val Ala 1 5 10 15

Ala Glu Arg Thr Met Gly Arg Val Val Glu Glu Thr Leu Cys Leu
20 25 30

Ser Gln Ser His Ala Phe Lys Gly Val Cys Leu Ser Asn Thr Asn Cys 35 40 45

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
Asp Asn Val Cys Lys Thr Glu Lys Phe Thr Gly Gly Glu Cys Lys Met
                        55
Asp Gly Val Met Arg Lys Cys Tyr Cys Lys Lys Val Cys
                    70
(2) INFORMATION FOR SEQ ID NO:3951:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 65 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..65
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578837
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3951:
Met Gln Asp Gly Glu Val His Arg Arg Arg Val Gln Asp Gly Arg Arg
                                     10
His Ala Gln Val Leu Leu Gln Glu Gly Leu Leu Gly His Asp Arg Gln
                                 25
                                                     30
            2.0
Gln Xaa Pro Gln Pro Tyr Gly Trp Cys Asp Pro Val Ala His Arg Leu
                             40
                                                 45
Gly Thr Arg Ser Cys Ser Gly Phe Ser Ala Leu Phe Ile Ser Ser Leu
                         55
Leu
65
(2) INFORMATION FOR SEQ ID NO:3952:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 950 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: single
           (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
           (A) NAME/KEY: -
           (B) LOCATION: 1..950
           (D) OTHER INFORMATION: / Ceres Seq. ID 1578845
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3952:
gtcaggcacc caagcacccc acgcgacgsg cacttccaca aggtggatag cgaacccaca
```

60 120 gcacgtctcc atctctggtt tgaccgccgc cgccgccgcc ctacgcggct acgccaggcg ccgaggcctt cgtcggcatt ttcgtcggca agcactcacc aggtattcag ccatggtttt 180 240 tcttgaggca gagatgtcat ggaatgtgtt gatctcacct agccagctgg accgcaaggn 300 cctcctgctc cgcaaggcta tcattgtgcg tcttctggag gatgtcacaa acaggagggc 360 ttcgaaagag catggctact acattgctgt taatcagctg aaggcaatat ctgaagggaa agtgcgtgaG ctaactggag atgttctgtt cccagtttca tttacttgca ttacacagaa 420 480 gcctatgaag ggagaggtca tggttgggca cgtggacagg atcctcaagc atggcgtgtt 540 cctcaaatcc ggacccgtgg agagcatctt cctggctgag aagtcgatga gtaattacaa gtacataggt ggggagaatg cgatgttcat gaacgaccac tcgaagctgg agaaggacac 600 660 cgccgtgcgc ttcaaggtcc tagggttccg ctggatggag gctgaccgcc aattccagct ccttgctacg atcgctggtg acttccttgg gccgctgtga actgcttcca caggtcaaac 720 780 aggttctaat gtacattgct cgttagatgg tggatggatg gttggatctg atgtgtagaa 840 ttaaactttg ctaccagtgg tttggtcttg tagaacctga gacatggtag gttttctaga tgctgttgcc agtgatattt agctctggtt tgaacgtatc agtgtacctg tatgatgaac 900 aagcgttgtc atggatgtac cttttctatg cttgcttgga agttaacgtt

- (2) INFORMATION FOR SEQ ID NO:3953:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 232 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..232
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578846
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3953:
- Ser Gly Thr Gln Ala Pro His Ala Thr Xaa Thr Ser Thr Arg Trp Ile 1 5 10 15
- Ala Asn Pro Gln His Val Ser Ile Ser Gly Leu Thr Ala Ala Ala Ala 20 25 30
- Ala Leu Arg Gly Tyr Ala Arg Arg Arg Gly Leu Arg Arg His Phe Arg 35 40 45
- Arg Gln Ala Leu Thr Arg Tyr Ser Ala Met Val Phe Leu Glu Ala Glu
 50 60
- Met Ser Trp Asn Val Leu Ile Ser Pro Ser Gln Leu Asp Arg Lys Xaa 65 70 75 80
- Leu Leu Leu Arg Lys Ala Ile Ile Val Arg Leu Leu Glu Asp Val Thr 85 90 95
- Asn Arg Arg Ala Ser Lys Glu His Gly Tyr Tyr Ile Ala Val Asn Gln
 100 105 110
- Leu Lys Ala Ile Ser Glu Gly Lys Val Arg Glu Leu Thr Gly Asp Val 115 120 125
- Leu Phe Pro Val Ser Phe Thr Cys Ile Thr Gln Lys Pro Met Lys Gly 130 135 140
- Glu Val Met Val Gly His Val Asp Arg Ile Leu Lys His Gly Val Phe 145 150 155 160
- Leu Lys Ser Gly Pro Val Glu Ser Ile Phe Leu Ala Glu Lys Ser Met 165 170 175
- Ser Asn Tyr Lys Tyr Ile Gly Gly Glu Asn Ala Met Phe Met Asn Asp 180 185 190
- His Ser Lys Leu Glu Lys Asp Thr Ala Val Arg Phe Lys Val Leu Gly
 195 200 205
- Phe Arg Trp Met Glu Ala Asp Arg Gln Phe Gln Leu Leu Ala Thr Ile 210 215 220
- Ala Gly Asp Phe Leu Gly Pro Leu 225 230
- (2) INFORMATION FOR SEQ ID NO:3954:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..175
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578847
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3954:
- Met Val Phe Leu Glu Ala Glu Met Ser Trp Asn Val Leu Ile Ser Pro

 1 10 15 15 16 Val
- Ser Gln Leu Asp Arg Lys Xaa Leu Leu Leu Arg Lys Ala Ile Ile Val 20 25 30
- Arg Leu Glu Asp Val Thr Asn Arg Arg Ala Ser Lys Glu His Gly
 35
 40
 45
- Tyr Tyr Ile Ala Val Asn Gln Leu Lys Ala Ile Ser Glu Gly Lys Val 50 55 60
- Arg Glu Leu Thr Gly Asp Val Leu Phe Pro Val Ser Phe Thr Cys Ile 65 70 75 80
 Thr Gln Lys Pro Met Lys Gly Glu Val Met Val Gly His Val Asp Arg
- Thr Gln Lys Pro Met Lys Gly Glu Val Met Val Gly His Val Asp Arc
- Ile Leu Lys His Gly Val Phe Leu Lys Ser Gly Pro Val Glu Ser Ile
 100 105 110

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
Phe Leu Ala Glu Lys Ser Met Ser Asn Tyr Lys Tyr Ile Gly Glu
                       120
                                         125
Asn Ala Met Phe Met Asn Asp His Ser Lys Leu Glu Lys Asp Thr Ala
          135
Val Arg Phe Lys Val Leu Gly Phe Arg Trp Met Glu Ala Asp Arg Gln
    150 155
Phe Gln Leu Leu Ala Thr Ile Ala Gly Asp Phe Leu Gly Pro Leu
                     170
          165
(2) INFORMATION FOR SEQ ID NO:3955:
    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 168 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS:
        (D) TOPOLOGY: linear
   (ii) MOLECULE TYPE: peptide
   (ix) FEATURE:
        (A) NAME/KEY: peptide
         (B) LOCATION: 1..168
         (D) OTHER INFORMATION: / Ceres Seq. ID 1578848
   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3955:
Met Ser Trp Asn Val Leu Ile Ser Pro Ser Gln Leu Asp Arg Lys Xaa
      5
                               10
Leu Leu Arg Lys Ala Ile Ile Val Arg Leu Leu Glu Asp Val Thr
                                             30
   20
                           25
Asn Arg Arg Ala Ser Lys Glu His Gly Tyr Tyr Ile Ala Val Asn Gln
                        40
Leu Lys Ala Ile Ser Glu Gly Lys Val Arg Glu Leu Thr Gly Asp Val
                     55
Leu Phe Pro Val Ser Phe Thr Cys Ile Thr Gln Lys Pro Met Lys Gly
                                   75
                 70
Glu Val Met Val Gly His Val Asp Arg Ile Leu Lys His Gly Val Phe
                                90
              85
Leu Lys Ser Gly Pro Val Glu Ser Ile Phe Leu Ala Glu Lys Ser Met
                                       110
     100
                           105
Ser Asn Tyr Lys Tyr Ile Gly Gly Glu Asn Ala Met Phe Met Asn Asp
                       120
                                          125
    115
His Ser Lys Leu Glu Lys Asp Thr Ala Val Arg Phe Lys Val Leu Gly
   130 135
                                      140
Phe Arg Trp Met Glu Ala Asp Arg Gln Phe Gln Leu Leu Ala Thr Ile
              150
                             155
```

165 (2) INFORMATION FOR SEQ ID NO:3956:

Ala Gly Asp Phe Leu Gly Pro Leu

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 686 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..686
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578852
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3956:

gctccggcct gta	accataa caat	gacggc gt	caggctca	gctcgctcgc	ccccccacg	60
aaaaccctaa tgg	reatecea esto	cttcac ct	ccaccacc	tcattactcc	tcccccacc	120
gtccccgccg ctt	cettete cace	accate aa	cacaaccc	casacatete	cacactcatc	180
gacgagatet geg	raacteec cete	etegaa ac	etettece	taaccaatac	cctacacaac	240
cgcctcggcg tcg	ggcccac cccc	racegus se	tatectea	cadacaacaa	cacaccactc	300
egeeteggeg teg	jaccagtt geog	deacta ge	cattetta	cgggcggcgg	agaggaggag	360
gtcggcggcg gag	staggtcc cggc	deddee dd	cgaggagg	Cgaaggccaa	ggaggagaag	420
atggcgttcg acg	gtgaagct ggag	gggttc ga	cgccgcgg	cgaaGctcaa	gatcatcaag	420

gagctgaggg cgttcacgaa tctgggtctg aaggaggcca aggatctcgt ggagaaggcg 480 cccgccgtgc tgaaggctgg agttcccaag gaggaggcgg agagtatcgc cgagaagatg 540 cggcgctcgg cgccaagatt gttctcgagt gaacgacgag agctgtgtat gccctcgttt cttgatttgt ttcgtgttc ttgtatgaaa aaaagagaga attttggaac aaggagataa 660 taattagtaa atttgactag agatcc

- (2) INFORMATION FOR SEQ ID NO:3957:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 219 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..219
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578853
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3957:
- Ala Pro Ala Cys Ser Arg Asp Gly Asp Gly Val Arg Leu Ser Ser Leu
 1 10 15
- Ala Pro Pro Thr Lys Thr Leu Met Ala Ser Arg Leu Leu His Leu Arg
- Arg Leu Ile Thr Pro Pro Pro Thr Val Pro Ala Ala Ser Phe Ser Thr 35 40 45
- Ala Val Ser Ala Thr Pro Xaa Val Ser Ala Leu Val Asp Glu Ile Cys 50 55 60
- Gly Leu Thr Leu Leu Glu Ala Ser Ser Leu Ala Asp Ala Leu Arg Gly 70 75 80
- Arg Leu Gly Val Asp Gln Leu Pro Pro Leu Ala Ile Leu Thr Gly Gly
 85 90 95
- Gly Ala Pro Leu Val Gly Gly Gly Val Gly Pro Gly Ala Ala Gly Glu 100 105 110
- Glu Ala Lys Ala Lys Glu Glu Lys Met Ala Phe Asp Val Lys Leu Glu 115 120 125
- Gly Phe Asp Ala Ala Ala Lys Leu Lys Ile Ile Lys Glu Leu Arg Ala 130 135 140
- Phe Thr Asn Leu Gly Leu Lys Glu Ala Lys Asp Leu Val Glu Lys Ala 145 150 155 160
- Pro Ala Val Leu Lys Ala Gly Val Pro Lys Glu Glu Ala Glu Ser Ile 165 170 175
- Ala Glu Lys Met Arg Arg Ser Ala Pro Arg Leu Phe Ser Ser Glu Arg 180 185 190
- Arg Glu Leu Cys Met Pro Ser Phe Leu Asp Leu Phe Arg Val Ser Cys 195 200 205
- Met Lys Lys Arg Glu Asn Phe Gly Thr Arg Arg 210 215
- (2) INFORMATION FOR SEQ ID NO:3958:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 196 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..196
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578854
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3958:
- Met Ala Ser Arg Leu Leu His Leu Arg Arg Leu Ile Thr Pro Pro 1 5 10 15
- Thr Val Pro Ala Ala Ser Phe Ser Thr Ala Val Ser Ala Thr Pro Xaa 20 25 30

```
Val Ser Ala Leu Val Asp Glu Ile Cys Gly Leu Thr Leu Leu Glu Ala
                            40
Ser Ser Leu Ala Asp Ala Leu Arg Gly Arg Leu Gly Val Asp Gln Leu
                        55
Pro Pro Leu Ala Ile Leu Thr Gly Gly Gly Ala Pro Leu Val Gly Gly
                    70
                                        75
Gly Val Gly Pro Gly Ala Ala Gly Glu Glu Ala Lys Ala Lys Glu Glu
                                    90
                85
Lys Met Ala Phe Asp Val Lys Leu Glu Gly Phe Asp Ala Ala Lys
                                105
Leu Lys Ile Ile Lys Glu Leu Arg Ala Phe Thr Asn Leu Gly Leu Lys
                                                125
                            120
Glu Ala Lys Asp Leu Val Glu Lys Ala Pro Ala Val Leu Lys Ala Gly
                                            140
                        135
Val Pro Lys Glu Glu Ala Glu Ser Ile Ala Glu Lys Met Arg Arg Ser
                                        155
                   150
Ala Pro Arg Leu Phe Ser Ser Glu Arg Arg Glu Leu Cys Met Pro Ser
                                   170
                                                        175
               165
Phe Leu Asp Leu Phe Arg Val Ser Cys Met Lys Lys Arg Glu Asn Phe
                                185
                                                    190
            180
Gly Thr Arg Arg
```

- (2) INFORMATION FOR SEQ ID NO:3959:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 772 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:

195

- (A) NAME/KEY: -
- (B) LOCATION: 1..772
- (D) OTHER INFORMATION: / Ceres Seq. ID 1578861
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3959:

aatcaaaccc tcacagcgaa ggacacaaaa acacaggtag ggttaggcga cgcggcggcg 60 agagcrcgag agtaggagga ggcgtcggcc atgacgggga aggcgaacrn angaagcaca 120 cggcgaagga gatcgccgcg aagatcgacg cggcgacgac gaaccgnrgc ggcggcaagg 180 tegggeagge ggateggeta gggeaggaea aggregggea egegaaetgg egtgeeeget 240 ctgccgcacc ccggcgcccg acatcaagtc catgcagatc caccacgagg cgcgccatcc 300 caageteet ttegageegg agaagetegt caacetgeae teeteeacee eegeegge 360 cgaggccacc acctccaagc ccaagcccgg ggtccgcggc aGcctcaaga agtagctggc 420 tggcttgcct gcctgactgc ctggggtaat tcccttcgat ttcaatccca tccaccgacc 480 cgatctacaa tcaatcaaag taccgcccgc cctccggctg cggtgtactg ttagtctgct 540 gctgcttctt attgttgtta tattgctgat acatgtctcg cgtgatagat gtgcaactat 600 660 atatcagtct cgtcgccggc aacactggca tgcttaaaca tgtgtcgctg ctgctccgtg atgeeggeka ekgetgetat tagegttaat gttagtgteg ategggtete ettgaacaat 720 ggcaggaatc tgttgcttgt ttactttctt ctaatggcaa gtaaagttcc ct

- (2) INFORMATION FOR SEQ ID NO:3960:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 148 amino acids (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..148
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578862
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3960:

Ser Asn Pro His Ser Glu Gly His Lys Asn Thr Gly Arg Val Arg Arg 10

```
Client Docket No. 80145.003
Arg Gly Gly Glu Ser Xaa Arg Val Gly Gly Gly Val Gly His Asp Gly
                                25
Glu Gly Glu Xaa Xaa Lys His Thr Ala Lys Glu Ile Ala Ala Lys Ile
                            40
Asp Ala Ala Thr Thr Asn Xaa Xaa Gly Gly Lys Val Gly Gln Ala Asp
                        55
Arg Leu Gly Gln Asp Lys Xaa Gly His Ala Asn Trp Arg Ala Arg Ser
                                        75
                    70
Ala Ala Pro Arg Arg Pro Thr Ser Ser Pro Cys Arg Ser Thr Thr Arg
                                    90
                85
Arg Ala Ile Pro Ser Ser Leu Ser Ser Arg Arg Ser Ser Ser Thr Cys
                                105
                                                    110
            100
Thr Pro Pro Pro Pro Pro Pro Arg Pro Pro Pro Ser Pro Ser
                                                125
                           120
Pro Gly Ser Ala Ala Ala Ser Arg Ser Ser Trp Leu Ala Cys Leu Pro
                        135
    130
Asp Cys Leu Gly
(2) INFORMATION FOR SEQ ID NO:3961:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 825 base pairs
          (B) TYPE: nucleic acid
```

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..825
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578909
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3961:

60 actoccaago occaatacao agoacagoag catoaacaca acotcagagg agoactactg cgagtcaatc agcgaccagc acagcaaccg aactcaaaag caagagccca agatccgagc 120 ggtaggagaa tccggacatg gcggcggcag cgagggcgtc gtggatggtg gcgatgagcg 180 teggegeggt ggaggegete aaggaceagg caggeetetg eegetggaac taegeeggeg 240 tggtcggtgg aggagtggac gtggaacasa acagctcctg cgcgaagagc gctgccagga 300 ggagcatgga gagcgtcgtc ggcgccggcg ccgcgtgggc ggtcgtcgtc gtcgtccagg 360 tatatgttgg agctggtgta gacgaggagc gaggcgtaga tgatggcgtg ctcgtggttc 420 ggcaGccgct caggcgggat ggagccgtcg gcgcggaacg gcatcggcga gtaggcgagc 480 atctgggtgg ccagcccgta sctcccgcgg ccagcatggc gatgggctcg aggcgacgca 540 ccccgtggcg ccgggaacca tgctgccggc gcgaggacga cgacgcgcga cgatgaggac 600 gacggggtcg gggcgaggga gaccaagagc ctcatgtggt tgaagaggtg ccataggccg 660 aggectgaga geategegee tgecagggtg tggetgatga ttttateege ggegeegegg 720 ggcagcatcg tcatgcggat cgatgtcagt cgtctaaact gttgatgctg gcttgctgat 780 ttctttgttt gcaatgcatg ctcgatcggg aaggatttat tctct

- (2) INFORMATION FOR SEQ ID NO:3962:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 152 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..152
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578910
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3962:

Met Ala Ala Ala Arg Ala Ser Trp Met Val Ala Met Ser Val Gly 15 10

Ala Val Glu Ala Leu Lys Asp Gln Ala Gly Leu Cys Arg Trp Asn Tyr 30 25

Ala Gly Val Val Gly Gly Val Asp Val Glu Xaa Asn Ser Ser Cys

```
40
       35
Ala Lys Ser Ala Ala Arg Arg Ser Met Glu Ser Val Val Gly Ala Gly
                       55
Ala Ala Trp Ala Val Val Val Val Gln Val Tyr Val Gly Ala Gly
                                      75
                   70
Val Asp Glu Glu Arg Gly Val Asp Asp Gly Val Leu Val Val Arg Gln
                                  90
Pro Leu Arg Arg Asp Gly Ala Val Gly Ala Glu Arg His Arg Arg Val
                             105
Gly Glu His Leu Gly Gly Gln Pro Val Xaa Pro Ala Ala Ser Met Ala
                          120
                                            125
      115
Met Gly Ser Arg Arg Arg Thr Pro Trp Arg Arg Glu Pro Cys Cys Arg
                                         140
   130 135
Arg Glu Asp Asp Asp Ala Arg Arg
           150
(2) INFORMATION FOR SEQ ID NO:3963:
    (i) SEQUENCE CHARACTERISTICS:
         (A) LENGTH: 143 amino acids
         (B) TYPE: amino acid
         (C) STRANDEDNESS:
         (D) TOPOLOGY: linear
   (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
         (A) NAME/KEY: peptide
         (B) LOCATION: 1..143
         (D) OTHER INFORMATION: / Ceres Seq. ID 1578911
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3963:
Met Val Ala Met Ser Val Gly Ala Val Glu Ala Leu Lys Asp Gln Ala
                                  10
              5
Gly Leu Cys Arg Trp Asn Tyr Ala Gly Val Val Gly Gly Val Asp
                              25
Val Glu Xaa Asn Ser Ser Cys Ala Lys Ser Ala Ala Arg Arg Ser Met
                          40
Glu Ser Val Val Gly Ala Gly Ala Ala Trp Ala Val Val Val Val
                       55
Gln Val Tyr Val Gly Ala Gly Val Asp Glu Glu Arg Gly Val Asp Asp
                                      75
                   70
Gly Val Leu Val Val Arg Gln Pro Leu Arg Arg Asp Gly Ala Val Gly
                                  90
               85
Ala Glu Arg His Arg Arg Val Gly Glu His Leu Gly Gly Gln Pro Val
                             105
          100
Xaa Pro Ala Ala Ser Met Ala Met Gly Ser Arg Arg Arg Thr Pro Trp
       115 120
                                              125
Arg Arg Glu Pro Cys Cys Arg Arg Glu Asp Asp Asp Ala Arg Arg
                   135
(2) INFORMATION FOR SEQ ID NO:3964:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 140 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..140
          (D) OTHER INFORMATION: / Ceres Seq. ID 1578912
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3964:
Met Ser Val Gly Ala Val Glu Ala Leu Lys Asp Gln Ala Gly Leu Cys
                                  10
              5
Arg Trp Asn Tyr Ala Gly Val Val Gly Gly Gly Val Asp Val Glu Xaa
```

25

20

```
Asn Ser Ser Cys Ala Lys Ser Ala Ala Arg Arg Ser Met Glu Ser Val
                            40
Val Gly Ala Gly Ala Ala Trp Ala Val Val Val Val Gln Val Tyr
                                            60
                        55
Val Gly Ala Gly Val Asp Glu Glu Arg Gly Val Asp Asp Gly Val Leu
                                        75
                    7.0
Val Val Arg Gln Pro Leu Arg Arg Asp Gly Ala Val Gly Ala Glu Arg
                                    90
His Arg Arg Val Gly Glu His Leu Gly Gly Gln Pro Val Xaa Pro Ala
                                                    110
            100
                                105
Ala Ser Met Ala Met Gly Ser Arg Arg Arg Thr Pro Trp Arg Arg Glu
       115
                            120
```

Pro Cys Cys Arg Arg Glu Asp Asp Asp Ala Arg Arg 130 135 140

- (2) INFORMATION FOR SEQ ID NO:3965:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 869 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..869
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578945
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3965: 60 ctaqcattta cgcggnvgag ctcgagccgg cggcgtcgac gggcggcggt ggcgacgacc acaacctgga cctgtcgctg gggagctcgg cggggaacaa aaggggcagc cttgacgacg 120 180 qctcccccac tcagaaaacc cagccgccgc cgcatcggcc tcccaggtaa gcagtagcgt ccaccccage egeogecatg aagegeaace ecegegteae gageteeege eggaagtgee 240 gcaagggcan cttcacggcc ccgtcctccg tccgccgcgt gctcatgtcc gcggcgctat 300 cgacggagCt ccgccacaag tacaatgtgc gttccatccc gatccgcaag gacgacgagg 360 tgcaggtcgt gcgcggcacc tacaagggcc gtgagggcaa agtggtgcag gtgtaccgcc 420 gtcgctgggt catccacgtt gagcggatca cccgcgagaa ggtgaacggc tccaccgtga 480 acgtgggcat ccacccttcc aaggtcatgg ttacaaagct gaagcttgac aaggaccgca 540 aggcgctcct cgaccgcaag gcccggggcc gcgccgccga caaggctaag ggcaagttta 600 ctgccgacga cgtcgccgcc gctgctggtg gcgccgccgc cactggcgcg tctctccagg 660 720 agatcgacta ggcttcgcgg ggatctgatg gtggtcctac cgcctattac tccttatcgc 780 tctagttttt gctatcaatg attatgtgct aggagtttta tgttacttat aaactgcttt gagcctcgat gggagttgaa cttaatgtgg agtgtatctg agatatgaag aactcattat 840 atggctaata tctcttgttg tgttctgct
- (2) INFORMATION FOR SEQ ID NO:3966:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 157 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..157
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578946
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3966:
- Met Lys Arg Asn Pro Arg Val Thr Ser Ser Arg Arg Lys Cys Arg Lys 1 5 10 15
- Gly Xaa Phe Thr Ala Pro Ser Ser Val Arg Arg Val Leu Met Ser Ala 20 25 30
- Ala Leu Ser Thr Glu Leu Arg His Lys Tyr Asn Val Arg Ser Ile Pro 35 40 45
- Ile Arg Lys Asp Asp Glu Val Gln Val Val Arg Gly Thr Tyr Lys Gly 50 55 60

```
Arg Glu Gly Lys Val Val Gln Val Tyr Arg Arg Arg Trp Val Ile His 65 70 75 80

Val Glu Arg Ile Thr Arg Glu Lys Val Asn Gly Ser Thr Val Asn Val 85 90 95

Gly Ile His Pro Ser Lys Val Met Val Thr Lys Leu Lys Leu Asp Lys
```

Gly Ile His Pro Ser Lys Val Met Val Thr Lys Leu Lys Leu Asp Lys
100 105 110

Asp Arg Lys Ala Leu Leu Asp Arg Lys Ala Arg Gly Arg Ala Ala Asp 115 120 125

Lys Ala Lys Gly Lys Phe Thr Ala Asp Asp Val Ala Ala Ala Ala Gly 130 135 140

Gly Ala Ala Ala Thr Gly Ala Ser Leu Gln Glu Ile Asp 145 150 155

- (2) INFORMATION FOR SEQ ID NO:3967:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..128
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578947
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3967:

Ser Ile Pro Ile Arg Lys Asp Asp Glu Val Gln Val Val Arg Gly Thr 20 25 30

Tyr Lys Gly Arg Glu Gly Lys Val Val Gln Val Tyr Arg Arg Arg Trp 35 40 45

Val Ile His Val Glu Arg Ile Thr Arg Glu Lys Val Asn Gly Ser Thr
50 55 60

Val Asn Val Gly Ile His Pro Ser Lys Val Met Val Thr Lys Leu Lys 65 70 75 80

Leu Asp Lys Asp Arg Lys Ala Leu Leu Asp Arg Lys Ala Arg Gly Arg
85
90
95

Ala Ala Asp Lys Ala Lys Gly Lys Phe Thr Ala Asp Asp Val Ala Ala 100 105 110 110 Ala Ala Gly Gly Ala Ala Ala Thr Gly Ala Ser Leu Gln Glu Ile Asp

120

- (2) INFORMATION FOR SEQ ID NO:3968:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 557 base pairs(B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..557
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578951
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3968:

agtetaatea etattgeagt eggettetet aatactggge eactggtte geteegeact 60 teegeegeta tggeegeege aacettetee geegeeggee geeggeteet eteeacegee 120 geggeaggea ngnagaaaac egageteece gteectateg eeegtmtteg eeagetegee 240 gtegeegge teteggeed eategaegg actetegege eeetgteee teeeacegee 240 eggeaceatg aegtegeea atacegega eetgaacgg gteeteggee eeggetegee eategeege eeggeege etgAgeegg etegtgeet eaateetege eggeatgee tetgteeed 240 eegeegeege etgAgeegg etegtgeet eaateetege eggeatgee tetgteeed 240 eegeegeege etgAgeegg etegtgeet eaateetege eggeatgee tetgteeege 240 eegeegeege etgAgeeggg etegtgeet eaateetege eggeatgee tetgteeege

gggacgccgt cacggacage atcetegeca agtegetetg ceteaceteg ggcgccgact 480 cegegeteca ceteeteegg aageettegt egggagegee geegnygete eagetettea 540 caaccateat egactee

- (2) INFORMATION FOR SEQ ID NO:3969:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 185 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..185
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578952
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3969:
- Ser Leu Ile Thr Ile Ala Val Gly Phe Ser Asn Thr Gly Pro Leu Val 1 5 10 15

Ser Leu Arg Thr Ser Ala Ala Met Ala Ala Ala Thr Phe Ser Ala Ala 20 25 30

Gly Arg Arg Leu Leu Ser Thr Ala Ala Ala Gly Xaa Xaa Lys Thr Glu

Leu Pro Val Pro Ile Ala Arg Xaa Arg Gln Leu Ala Arg Ala Gly Arg
50 60

Leu Asp Asp Ile Asp Ala Thr Leu Ala Pro Leu Phe Pro Ser His Pro 65 70 75 80

Val Ala Ala Leu Ser Ala Leu Ser Thr Val Gly Leu Pro Xaa Pro Arg 85 90 95

Leu Arg Ala Ala Arg His His Asp Val Ala Gln Tyr Arg Ala Pro Glu 100 105 110

Arg Gly Pro Arg Ser Thr Pro Pro Pro Pro Pro Pro Glu Pro Gly Ser 115 120 125

Cys Pro Gln Ser Ser Pro Arg Met Pro Leu Ser Arg Gly Thr Pro Ser 130 135 140

Arg Thr Ala Ser Ser Pro Ser Arg Ser Ala Ser Pro Arg Ala Pro Thr 145 150 155 160

Pro Arg Ser Thr Ser Ser Gly Ser Leu Arg Arg Glu Arg Arg Xaa Xaa 165 170 175

Ser Ser Ser Ser Gln Pro Ser Ser Thr 180 185

- (2) INFORMATION FOR SEQ ID NO:3970:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 162 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..162
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578953
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3970:

Met Ala Ala Ala Thr Phe Ser Ala Ala Gly Arg Arg Leu Leu Ser Thr 1 5 10 15

Ala Ala Ala Gly Xaa Xaa Lys Thr Glu Leu Pro Val Pro Ile Ala Arg 20 25 30

Xaa Arg Gln Leu Ala Arg Ala Gly Arg Leu Asp Asp Ile Asp Ala Thr

Leu Ala Pro Leu Phe Pro Ser His Pro Val Ala Ala Leu Ser Ala Leu 50 55 60

Ser Thr Val Gly Leu Pro Xaa Pro Arg Leu Arg Ala Ala Arg His His 65 70 75 80

- (2) INFORMATION FOR SEQ ID NO:3971:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 752 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..752
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578993
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3971: gactagggtt ctgtccacct tccaggtcct tcgaacttcc acgcattcct actactcctg gctcccgcga cctaacgccg ccactcctga cttcgccatc cggcgatcac cagagcccta 120 gctccggcgt ctctagcgat ccccaaaaAc ccactccgcc gcatttctgc cgacttggcc 180 ggattggtcg cttattgaaN atgGCtacgc cacttatagc aggacttgca gttgcagcaa 240 ctgctcttgc tggtcgatat ggtgtccaag catggcaagc ttataaggca aggcctatag 300 ttccaaggat gcgcaaattc tatgaaggtg gctttcaacc tacaatgaac cgaaggraag 360 420 ctgcattaat ccttggtgtc agggaaactg ccaacgcaga gaaggtaaaa gaggcgcaca agagggttat ggtcgccaac catccagatg ctggtggaag tcattacctt gcgtcaaaga 480 ttaatgaggc gaaggatgtg ttgtcaggga aaacaaaagg aggtgggtcg gccttctgat 540 tgtagaatta agaatgcact ctctgctaga aggataattt tgtgcctcta aatttagcat 600 taKTTgaaga tactgtagac cgcagtttag tcttggtatt gcggaaattt ctggacaaag 660 catattgggc cttctgtgaa gtagttatcc agtgcttatt aatactcagc tgtgcctgct 720 tctataaaga tatacatgat gaaggttaca tc
- (2) INFORMATION FOR SEQ ID NO:3972:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 178 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..178
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578994 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3972:

Ser Gly Asp His Gln Ser Pro Ser Ser Gly Val Ser Ser Asp Pro Gln

Lys Pro Thr Pro Pro His Phe Cys Arg Leu Gly Arg Ile Gly Arg Leu
50 55 60

Leu Xaa Met Ala Thr Pro Leu Ile Ala Gly Leu Ala Val Ala Ala Thr 65 70 75 80

Ala Leu Ala Gly Arg Tyr Gly Val Gln Ala Trp Gln Ala Tyr Lys Ala 85 90 95 Ala Phe

- (2) INFORMATION FOR SEQ ID NO:3973:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 112 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..112
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1578995
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3973:

Met Ala Thr Pro Leu Ile Ala Gly Leu Ala Val Ala Ala Thr Ala Leu

1 5 10 15

10 15

Ala Gly Arg Tyr Gly Val Gln Ala Trp Gln Ala Tyr Lys Ala Arg Pro 20 25 30

Ile Val Pro Arg Met Arg Lys Phe Tyr Glu Gly Gly Phe Gln Pro Thr 35 40 45

Met Asn Arg Arg Xaa Ala Ala Leu Ile Leu Gly Val Arg Glu Thr Ala 50 55 60

Asn Ala Glu Lys Val Lys Glu Ala His Lys Arg Val Met Val Ala Asn 65 70 75 80

His Pro Asp Ala Gly Gly Ser His Tyr Leu Ala Ser Lys Ile Asn Glu 85 90 95

Ala Lys Asp Val Leu Ser Gly Lys Thr Lys Gly Gly Gly Ser Ala Phe 100 105 110

- (2) INFORMATION FOR SEQ ID NO:3974:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 848 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..848
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579004
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3974:

aaaaagataa agttaggctc ggcaccgggg gctcatccgc aagcctgtgg acgcgagtga 60 gtgaacacca gccgtattgt cccgaccccg accgatcctc gcctgctgca gccatggcga 120 cctccgcggc gctctctacc gccgccaatc ccacccagct ctgccggtcc cgcgcttcgc 180 tgggcaagcc ggtgaagggg cttggcctga gcatgggccg cgagcgccc cagcggagca 240 ttgtgtgcca ggcggcgagc agcatctccg ccgaccgcgt ccccgacatg gagaagcgga 300 agetgatgaa ceteeteete eteggegeea tetegttgee caeegtegge atggtegtee 360 cctacggcgc cttcttcgtc cctgccggct ccggggaacgc cggcggCggg acctacgcga 420 aggacaaget gggcaacgac atcacggtgg aggegtgget caacaegeac ggteecaaeg 480 accgcacget cgcgcagggg ctcaagggtg accccacgta cctggtggtg gagcaggaca 540 agacgctgge cacctacggg atcaacgccg tgtgcactca ceteggctge gtcgtgccgt 600 ggaacggcge cgagaacaag ttcatctgce catgccacgg atcccagtac aacaaccagg 660 gcaaggtggt cgcaggtcca ttcgagtcca tgaaggtgaa gcatgggaga tccaagcgag 720 tctggaaaga ttgtcgatgt tagtaggctg tccttatttt gtttagagac ttgtggctat 780 gtgatttgta gcgaaacaag gctgtgatgt gttaactttg ccttataata ttttggttga 840

- acgtgctc
 (2) INFORMATION FOR SEQ ID NO:3975:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 246 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

5

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..246
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579005

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3975: Lys Asp Lys Val Arg Leu Gly Thr Gly Gly Ser Ser Ala Ser Leu Trp

Thr Arg Val Ser Glu His Gln Pro Tyr Cys Pro Asp Pro Asp Arg Ser 20 25 30

Ser Pro Ala Ala Ala Met Ala Thr Ser Ala Ala Leu Ser Thr Ala Ala 35 40 45

Asn Pro Thr Gln Leu Cys Arg Ser Arg Ala Ser Leu Gly Lys Pro Val 50 55 60

Lys Gly Leu Gly Leu Ser Met Gly Arg Glu Arg Ala Gln Arg Ser Ile 65 70 75 80

Val Cys Gln Ala Ala Ser Ser Ile Ser Ala Asp Arg Val Pro Asp Met
85 90 95

Glu Lys Arg Lys Leu Met Asn Leu Leu Leu Leu Gly Ala Ile Ser Leu 100 105 110

Pro Thr Val Gly Met Val Val Pro Tyr Gly Ala Phe Phe Val Pro Ala 115 120 125 Gly Ser Gly Asn Ala Gly Gly Gly Thr Tyr Ala Lys Asp Lys Leu Gly

130 135 140
Asn Asp Ile Thr Val Glu Ala Trp Leu Asn Thr His Gly Pro Asn Asp

145 150 155 160
Arg Thr Leu Ala Gln Gly Leu Lys Gly Asp Pro Thr Tyr Leu Val Val

165 170 175
Glu Gln Asp Lys Thr Leu Ala Thr Tyr Gly Ile Asn Ala Val Cys Thr

His Leu Gly Cys Val Val Pro Trp Asn Gly Ala Glu Asn Lys Phe Ile
195 200 205

Cys Pro Cys His Gly Ser Gln Tyr Asn Asn Gln Gly Lys Val Val Ala

Gly Pro Phe Glu Ser Met Lys Val Lys His Gly Arg Ser Lys Arg Val 225 230 240

Trp Lys Asp Cys Arg Cys

245

- (2) INFORMATION FOR SEQ ID NO:3976:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 209 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..209
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579006

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3976: Met Ala Thr Ser Ala Ala Leu Ser Thr Ala Ala Asn Pro Thr Gln Leu 1.0 5 Cys Arg Ser Arg Ala Ser Leu Gly Lys Pro Val Lys Gly Leu Gly Leu 25 20 Ser Met Gly Arg Glu Arg Ala Gln Arg Ser Ile Val Cys Gln Ala Ala 40 Ser Ser Ile Ser Ala Asp Arg Val Pro Asp Met Glu Lys Arg Lys Leu 55 Met Asn Leu Leu Leu Gly Ala Ile Ser Leu Pro Thr Val Gly Met 75 70 Val Val Pro Tyr Gly Ala Phe Phe Val Pro Ala Gly Ser Gly Asn Ala 90 85 Gly Gly Gly Thr Tyr Ala Lys Asp Lys Leu Gly Asn Asp Ile Thr Val 105 100 Glu Ala Trp Leu Asn Thr His Gly Pro Asn Asp Arg Thr Leu Ala Gln 115 120 125 Gly Leu Lys Gly Asp Pro Thr Tyr Leu Val Val Glu Gln Asp Lys Thr 135 140Leu Ala Thr Tyr Gly Ile Asn Ala Val Cys Thr His Leu Gly Cys Val 150 155 Val Pro Trp Asn Gly Ala Glu Asn Lys Phe Ile Cys Pro Cys His Gly 165 170 Ser Gln Tyr Asn Asn Gln Gly Lys Val Val Ala Gly Pro Phe Glu Ser 180 185 Met Lys Val Lys His Gly Arg Ser Lys Arg Val Trp Lys Asp Cys Arg 200 Cys

- (2) INFORMATION FOR SEQ ID NO:3977:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 176 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..176
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579007
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3977:
- Met Gly Arg Glu Arg Ala Gln Arg Ser Ile Val Cys Gln Ala Ala Ser 1 5 10 15
- Ser Ile Ser Ala Asp Arg Val Pro Asp Met Glu Lys Arg Lys Leu Met 20 25 30
- Asn Leu Leu Leu Gly Ala Ile Ser Leu Pro Thr Val Gly Met Val 35 40 45
- Val Pro Tyr Gly Ala Phe Phe Val Pro Ala Gly Ser Gly Asn Ala Gly 50 55 60
- Gly Gly Thr Tyr Ala Lys Asp Lys Leu Gly Asn Asp Ile Thr Val Glu 65 70 75 80
- Ala Trp Leu Asn Thr His Gly Pro Asn Asp Arg Thr Leu Ala Gln Gly 85 90 95
 Leu Lys Gly Asp Pro Thr Tyr Leu Val Val Glu Gln Asp Lys Thr Leu
- 100 110 The Two Cly Ile Acp Ale Vel Cys Thr His Leu Gly Cys Val Val
- Ala Thr Tyr Gly Ile Asn Ala Val Cys Thr His Leu Gly Cys Val Val 115 120 125
- Pro Trp Asn Gly Ala Glu Asn Lys Phe Ile Cys Pro Cys His Gly Ser 130 135 140
- Gln Tyr Asn Asn Gln Gly Lys Val Val Ala Gly Pro Phe Glu Ser Met
 145 150 155 160

Lys Val Lys His Gly Arg Ser Lys Arg Val Trp Lys Asp Cys Arg Cys 165 170 175

- (2) INFORMATION FOR SEQ ID NO:3978:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 982 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..982
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579012
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3978: 60 catttgctcc aagtcccaaa tactagcarg cggcaggcgg ccaagaccgg tgtccctcga cgacctgccg agtgccgagg caagcaagac gcgaggaggc tgtaagctgc catcagcagc 120 ggcgatggcg ggcgccgagg tgggagaaga caagtaccgc tccttcatcc acggcgaggg 180 cgagagggac accgtgtgga ggtacggcgc cccgcccaac tacgacgtgg tcaacaagct 240 300 cttcqaqqaq qaqaqqactc aggtgtggcc cgagggctcg ctggaggaga aggtgcagcg gttgctcaag agctgggaga tggagctggt gcacaargtg cggcccgagg accagaagac 360 cgtcaactcg gagaaatact ctgccagcac caacgggatg arcgctctra cccgggccga 420 ggtgatggcc atcggcggct acaacaactt cctgcgcacc aagctgcccc cggagcaccg 480 catctacgac ccggacagcg agaccgtgga gtcCgccatg gccaccttca ccacggcctt 540 cccgcgggGC ttcgcCatcg aggtgctcga cgtctacagc ggcccgccca ggatcgcctt 600 caagttccgc cactggggct acatggaggg cccttcaagg gccacccgcc gcacggccag 660 cgggtcgagc tcttcggcgt ctgcatcttc catgttgacg aagacatgaa ggtggacaag 720 tcagagtact tctacgagcg cggcaacttc ctcgccggct tcttgagtgc ccctgcccct 780 gatggctcag gcggttgccc cgtgatgcgc gggaactgaa tgggcctgca atgggacatt 840 ggaagactag gcattggaac attgggatta ttagcattag cgatcccgaa tccgctttta 900 ttacggttta ataattccat catgtaacat gacacttgca tttgtgtttg aataaacatg 960
- (2) INFORMATION FOR SEQ ID NO:3979:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 235 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

tcgttgcttc gacatattag cg

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..235
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579013
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3979:
- Ile Cys Ser Lys Ser Gln Ile Leu Ala Xaa Gly Arg Arg Pro Arg Pro
- Val Ser Leu Asp Asp Leu Pro Ser Ala Glu Ala Ser Lys Thr Arg Gly
 20 25 30
- Gly Cys Lys Leu Pro Ser Ala Ala Ala Met Ala Gly Ala Glu Val Gly
 35 40 45
- Glu Asp Lys Tyr Arg Ser Phe Ile His Gly Glu Gly Glu Arg Asp Thr 50 55 60
- Val Trp Arg Tyr Gly Ala Pro Pro Asn Tyr Asp Val Val Asn Lys Leu 65 70 75 80
 Phe Glu Glu Glu Arg Thr Gln Val Trp Pro Glu Gly Ser Leu Glu Glu
- 85 90 95

 Lys Val Gln Arg Leu Leu Lys Ser Trp Glu Met Glu Leu Val His Xaa
 100 105 110
- Val Arg Pro Glu Asp Gln Lys Thr Val Asn Ser Glu Lys Tyr Ser Ala

```
Ser Thr Asn Gly Met Xaa Ala Xaa Thr Arg Ala Glu Val Met Ala Ile
130
Gly Gly Tyr Asn Asn Phe Leu Arg Thr Lys Leu Pro Pro Glu His Arg
145
150
155
160
Ile Tyr Asp Pro Asp Ser Glu Thr Val Glu Ser Ala Met Ala Thr Phe
```

Thr Thr Ala Phe Pro Arg Gly Phe Ala Ile Glu Val Leu Asp Val Tyr
180 185 190

Ser Gly Pro Pro Arg Ile Ala Phe Lys Phe Arg His Trp Gly Tyr Met
195 200 205

Glu Gly Pro Ser Arg Ala Thr Arg Arg Thr Ala Ser Gly Ser Ser Ser 210 215 220

Ser Ala Ser Ala Ser Ser Met Leu Thr Lys Thr 225 230 235

- (2) INFORMATION FOR SEQ ID NO:3980:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 194 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..194
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579014
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3980: Met Ala Gly Ala Glu Val Gly Glu Asp Lys Tyr Arg Ser Phe Ile His 1 $\,$ 10 $\,$ 15
- Gly Glu Gly Glu Arg Asp Thr Val Trp Arg Tyr Gly Ala Pro Pro Asn 20 25 30
- Tyr Asp Val Val Asn Lys Leu Phe Glu Glu Glu Arg Thr Gln Val Trp 35 40 45
- Pro Glu Gly Ser Leu Glu Glu Lys Val Gln Arg Leu Leu Lys Ser Trp 50 55 60
- Glu Met Glu Leu Val His Xaa Val Arg Pro Glu Asp Gln Lys Thr Val 65 70 75 80 Asn Ser Glu Lys Tyr Ser Ala Ser Thr Asn Gly Met Xaa Ala Xaa Thr
- 85 90 95
 Arg Ala Glu Val Met Ala Ile Gly Gly Tyr Asn Asn Phe Leu Arg Thr
- 100 105 110 Lys Leu Pro Pro Glu His Arg Ile Tyr Asp Pro Asp Ser Glu Thr Val
- Lys Leu Fio Fio Giu nis Aig Tie Tyr Asp Fio Asp Ser Giu ini vai 115 120 125
- Glu Ser Ala Met Ala Thr Phe Thr Thr Ala Phe Pro Arg Gly Phe Ala
 130
 135
 140
 The Gly Val Ley Asp Val Tyr Ser Gly Pro Pro Arg The Ala Phe Lys
- Ile Glu Val Leu Asp Val Tyr Ser Gly Pro Pro Arg Ile Ala Phe Lys 145 150 155 160
- Phe Arg His Trp Gly Tyr Met Glu Gly Pro Ser Arg Ala Thr Arg Arg 165 170 175 Thr Ala Ser Gly Ser Ser Ser Ser Ala Ser Ala Ser Ser Met Leu Thr

185

190

Lys Thr

- (2) INFORMATION FOR SEQ ID NO:3981:
 - (i) SEQUENCE CHARACTERISTICS:

180

- (A) LENGTH: 129 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..129
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579015
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3981:

 Met Glu Leu Val His Xaa Val Arg Pro Glu Asp Gln Lys Thr Val Asn

 1 10 15
- Ser Glu Lys Tyr Ser Ala Ser Thr Asn Gly Met Xaa Ala Xaa Thr Arg 20 25 30
- Ala Glu Val Met Ala Ile Gly Gly Tyr Asn Asn Phe Leu Arg Thr Lys 35 40 45
- Leu Pro Pro Glu His Arg Ile Tyr Asp Pro Asp Ser Glu Thr Val Glu 50 55 60
- Ser Ala Met Ala Thr Phe Thr Thr Ala Phe Pro Arg Gly Phe Ala Ile 65 70 75 80
- Glu Val Leu Asp Val Tyr Ser Gly Pro Pro Arg Ile Ala Phe Lys Phe 85 90 95
- Arg His Trp Gly Tyr Met Glu Gly Pro Ser Arg Ala Thr Arg Arg Thr 100 105 110
- Ala Ser Gly Ser Ser Ser Ser Ala Ser Ala Ser Ser Met Leu Thr Lys
 115 120 125

Thr

- (2) INFORMATION FOR SEQ ID NO:3982:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1205
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579027
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3982: ctctctgtcg catttcccgt cctgtccttc ccttacccgg cggcttaaac cctagttctc acteceateg eegetteage teegeegeag eagatggagt tetggggtet egaggteaag 120 cctggttcca ctgttaagtg tgagcctgga tatggctttg tgctgcacct ttcccaggct gctcttgggg aatcgaagaa gagtgataat gccttgatgt atgtcaaaat tgatgatcag 240 300 aaacttgcca ttggaaccct ctctgttgac aagaacccac acatacaatt tgatctggtt ttcgataaag agtttgagct gtcgcacaca tcaaaaacta ccagcgtctt cttcactggc 360 tacaaggttg agcagccatt cgaggaagat gagccttctt ccacaatgga tcttgattct 420 gaagatgaag acgaggagcg ggatgttcca gtagtcaagg aaaatggcaa agctgatggg 480 540 aagaaacaga aaagtcaaga aaaggcagtt gctgcacctt caaaatcaag tccggattcc 600 aagaagagca asgaTgacTg atgattctga tgaggaygag ackgaygatt ctgatgaggg tttatcttct gaagaaggcg atgatgattc aagtgatgaa gatgatacca gtgacgatga 660 ggaggaagac actccaactc ctaagaagcc tgaggtaggc aagaagagag ctgctgaaag 720 780 ttccgtgctg aaaactcctc tatctgataa gaaagcaaag gttgccacac cgtcatctca gaagacaggt ggcaagaagg gcgccgccgt ccatgtggca actccacacc cagcaaaagg 840 caagaccatt gtaaacaatg acaaatcggt caagtctcca aaatctgcgc caaaatctgg 900 tgtcccttgc aaatcgtgca gcaagtcatt catcagtcag acggcacttc aggctcactc 960 gaaggcgaag catgggggca agtgagtcgc aggtccaata gagtcaacaa caaatgcgaa 1020 acatgggaga ggagggtaag cgagagtctc gaaagagtgt cggtggaagt aggcctaacc 1080 ttattttgtt tagagacggg ctatgcgttc gatgtagcaa aacaaggctg tggtttgtgt 1140 acttcaatat ttgggttgtg tgtttcgaat ttttttttga acgtgtctcg gattgttgtg 1200
- gtgcc (2) INFORMATION FOR SEQ ID NO:3983:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 155 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..155
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579028

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3983:

Met Glu Phe Trp Gly Leu Glu Val Lys Pro Gly Ser Thr Val Lys Cys

1 10 15

Glu Pro Gly Tyr Gly Phe Val Leu His Leu Ser Gln Ala Ala Leu Gly
20 25 30

Glu Ser Lys Lys Ser Asp Asn Ala Leu Met Tyr Val Lys Ile Asp Asp 35 40 45

Gln Lys Leu Ala Ile Gly Thr Leu Ser Val Asp Lys Asn Pro His Ile 50 55 60

Gln Phe Asp Leu Val Phe Asp Lys Glu Phe Glu Leu Ser His Thr Ser 65 70 75 80

Lys Thr Thr Ser Val Phe Phe Thr Gly Tyr Lys Val Glu Gln Pro Phe 85 90 95

Glu Glu Asp Glu Pro Ser Ser Thr Met Asp Leu Asp Ser Glu Asp Glu
100 105 110

Asp Glu Glu Arg Asp Val Pro Val Val Lys Glu Asn Gly Lys Ala Asp 115 120 125

Gly Lys Lys Gln Lys Ser Gln Glu Lys Ala Val Ala Ala Pro Ser Lys 130 135 140

Ser Ser Pro Asp Ser Lys Lys Ser Xaa Asp Asp 145 150 150

- (2) INFORMATION FOR SEQ ID NO:3984:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 173 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..173
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579029

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3984:

Met Ala Lys Leu Met Gly Arg Asn Arg Lys Val Lys Lys Arg Gln Leu

5 10 15
Leu His Leu Gln Asn Gln Val Arg Ile Pro Arg Arg Ala Xaa Met Thr

Leu His Leu Gln Asn Gln Val Arg Ile Pro Arg Arg Ala Xaa Met Thr 20 25 30

Asp Asp Ser Asp Glu Xaa Glu Xaa Xaa Asp Ser Asp Glu Gly Leu Ser 35 40 45

Ser Glu Glu Gly Asp Asp Asp Ser Ser Asp Glu Asp Asp Thr Ser Asp 50 55 60

Asp Glu Glu Glu Asp Thr Pro Thr Pro Lys Lys Pro Glu Val Gly Lys 65 70 75 80
Lys Arg Ala Ala Glu Ser Ser Val Leu Lys Thr Pro Leu Ser Asp Lys

85 90 95
Lys Ala Lys Val Ala Thr Pro Ser Ser Gln Lys Thr Gly Gly Lys Lys

100 105 110

Gly Ala Ala Val His Val Ala Thr Pro His Pro Ala Lys Gly Lys Thr

115 120 125

Ile Val Asn Asn Asp Lys Ser Val Lys Ser Pro Lys Ser Ala Pro Lys 130 135 140

Ser Gly Val Pro Cys Lys Ser Cys Ser Lys Ser Phe Ile Ser Gln Thr 145 150 155 160

Ala Leu Gln Ala His Ser Lys Ala Lys His Gly Gly Lys
165 170

(2) INFORMATION FOR SEQ ID NO:3985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..169
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579030
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3985:

Met Gly Arg Asn Arg Lys Val Lys Lys Arg Gln Leu Leu His Leu Gln
1 10 15

Asn Gln Val Arg Ile Pro Arg Arg Ala Xaa Met Thr Asp Asp Ser Asp 20 25 30

Glu Xaa Glu Xaa Xaa Asp Ser Asp Glu Gly Leu Ser Ser Glu Gly Gly 35 40 45

Asp Asp Asp Ser Ser Asp Glu Asp Asp Thr Ser Asp Asp Glu Glu Glu 50 55 60

Asp Thr Pro Thr Pro Lys Lys Pro Glu Val Gly Lys Lys Arg Ala Ala 65 70 75 80

Glu Ser Ser Val Leu Lys Thr Pro Leu Ser Asp Lys Lys Ala Lys Val 85 90 95

Ala Thr Pro Ser Ser Gln Lys Thr Gly Gly Lys Lys Gly Ala Ala Val

His Val Ala Thr Pro His Pro Ala Lys Gly Lys Thr Ile Val Asn Asn 115 120 125

Asp Lys Ser Val Lys Ser Pro Lys Ser Ala Pro Lys Ser Gly Val Pro
130 135 140

Cys Lys Ser Cys Ser Lys Ser Phe Ile Ser Gln Thr Ala Leu Gln Ala 145 150 155 160

His Ser Lys Ala Lys His Gly Gly Lys 165

- (2) INFORMATION FOR SEQ ID NO:3986:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 835 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..835
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579042
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3986:

attgtwcccg ccgtcttccc caattcgccg ccagscaggg taaaaaaaaa aaagaggaag 60 aaaacctcct gcaattccca ttccatcgat ccagctccgg tccaagccaa agctttcttc 120 gccccaaacc ttgttcaact ccaatgtcgg acttcttctt cgggagcccg ttccgccgcc 180 tettecacge gegeceette catgeogteg actggteete egeegeggeg geggecatgg 240 actgggtgga gaccccgtcc tcccacgtgc tgcgcgtcaa cgtgccggga ctcggcaagg 300 acgacgtcaa ggtccaggtc gacgagggca aagtgctcac catcaggggc gccccgcccg 360 cggccaagga gaaggggaag gaggacgagg aggaggggac ggtgtggcac gtggcggaGc 420 geggeaagee ggagttegeg egggeegtgg egetgeegga gaaegtgege gtggaeggga 480 540 teagggeegg ettggagaac ggggttetea eegtegttgt geecaaggaa gtegeeeegg cccqgcccaa gcccaggtcc atcgccgtct ccagcaagct ctgatgagtc tgaggcgatg 600 agtggcagag tgtacggtgc agtgttaaac catgccgcaa atggcgggta cgtctgaatt 660 ctggtcgtgt gtgtgtccgt gtcacctaga aaacgcgcac cccgtgtaaa ttgcgataca 720 atttcatgca agtaatccga gtgagtgaaa atggctgcta gccaaaaacg gtcgattctg 780 aatatgcagt ttgcaataaa ctaaattaaa aggaaaaggc atgtttgaat atgtg

- (2) INFORMATION FOR SEQ ID NO:3987:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 218 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..218
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579043
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3987:
- Ile Xaa Pro Ala Val Phe Pro Asn Ser Pro Pro Xaa Arg Val Lys Lys 1 5 10 15
- Lys Lys Arg Lys Lys Thr Ser Cys Asn Ser His Ser Ile Asp Pro Ala 20 25 30
- Pro Val Gln Ala Lys Ala Phe Phe Ala Pro Asn Leu Val Gln Leu Gln 35 40 45
- Cys Arg Thr Ser Ser Ser Gly Ala Arg Ser Ala Ala Ser Ser Thr Arg 50 60
- Ala Pro Ser Met Pro Ser Thr Gly Pro Pro Pro Arg Arg Arg Pro Trp 65 70 75 80
- Thr Gly Trp Arg Pro Arg Pro Pro Thr Cys Cys Ala Ser Thr Cys Arg 85 90 95
- Asp Ser Ala Arg Thr Thr Ser Arg Ser Arg Ser Thr Arg Ala Lys Cys 100 105 110
- Ser Pro Ser Gly Ala Pro Arg Pro Arg Pro Arg Arg Arg Gly Arg Arg 115 120 125
- Thr Arg Arg Gly Arg Cys Gly Thr Trp Arg Ser Ala Ala Ser Arg 130 135 140
- Ser Ser Arg Gly Pro Trp Arg Cys Arg Arg Thr Cys Ala Trp Thr Gly 145 150 155 160
- Ser Gly Pro Ala Trp Arg Thr Gly Phe Ser Pro Ser Leu Cys Pro Arg 165 170 175
- Lys Ser Pro Arg Pro Gly Pro Ser Pro Gly Pro Ser Pro Ser Pro Ala 180 185 190
- Ser Ser Asp Glu Ser Glu Ala Met Ser Gly Arg Val Tyr Gly Ala Val 195 200 205
- Leu Asn His Ala Ala Asn Gly Gly Tyr Val 210 215
- (2) INFORMATION FOR SEQ ID NO:3988:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 193 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..193
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579044
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3988:
- Cys Xaa Arg Arg Leu Pro Gln Phe Ala Ala Xaa Gln Gly Lys Lys
 1 10 15
- Lys Glu Glu Glu Asn Leu Leu Gln Phe Pro Phe His Arg Ser Ser Ser 20 25 30
- Gly Pro Ser Gln Ser Phe Leu Arg Pro Lys Pro Cys Ser Thr Pro Met
- Ser Asp Phe Phe Phe Gly Ser Pro Phe Arg Arg Leu Phe His Ala Arg
- Pro Phe His Ala Val Asp Trp Ser Ser Ala Ala Ala Ala Ala Met Asp 65 70 75 80
- Trp Val Glu Thr Pro Ser Ser His Val Leu Arg Val Asn Val Pro Gly
 85 90 95

```
Leu Gly Lys Asp Asp Val Lys Val Gln Val Asp Glu Gly Lys Val Leu
                               105
           100
Thr Ile Arg Gly Ala Pro Pro Ala Ala Lys Glu Lys Gly Lys Glu Asp
                           120
       115
Glu Glu Glu Gly Thr Val Trp His Val Ala Glu Arg Gly Lys Pro Glu
                                           140
                       135
Phe Ala Arg Ala Val Ala Leu Pro Glu Asn Val Arg Val Asp Gly Ile
                                       155
                   150
Arg Ala Gly Leu Glu Asn Gly Val Leu Thr Val Val Val Pro Lys Glu
                                170
Val Ala Pro Ala Arg Pro Lys Pro Arg Ser Ile Ala Val Ser Ser Lys
            180
                               185
```

- (2) INFORMATION FOR SEQ ID NO:3989:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 151 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

Len

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..151
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579045
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3989: Met Pro Ser Thr Gly Pro Pro Pro Arg Arg Pro Trp Thr Gly Trp 10 5 Arg Pro Arg Pro Pro Thr Cys Cys Ala Ser Thr Cys Arg Asp Ser Ala 25 20 Arg Thr Thr Ser Arg Ser Arg Ser Thr Arg Ala Lys Cys Ser Pro Ser 4.0 Gly Ala Pro Arg Pro Arg Pro Arg Arg Arg Gly Arg Arg Thr Arg Arg 55 Arg Gly Arg Cys Gly Thr Trp Arg Ser Ala Ala Ser Arg Ser Ser Arg 75 70 Gly Pro Trp Arg Cys Arg Arg Thr Cys Ala Trp Thr Gly Ser Gly Pro 95 90 85 Ala Trp Arg Thr Gly Phe Ser Pro Ser Leu Cys Pro Arg Lys Ser Pro 110 105 100 Arg Pro Gly Pro Ser Pro Gly Pro Ser Pro Ser Pro Ala Ser Ser Asp 125 120 Glu Ser Glu Ala Met Ser Gly Arg Val Tyr Gly Ala Val Leu Asn His
- 130 135 Ala Ala Asn Glv Glv Tvr Val
- Ala Ala Asn Gly Gly Tyr Val 145 150
- (2) INFORMATION FOR SEQ ID NO:3990:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 827 base pairs
 - (B) TYPE: nucleic acid(C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..827
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579078
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3990: gtcgcccca cgctagtcgc ccaaactacg caaccgatat attccccagc accccgttc cagccgtcca accgagacac cgcgtgcgaa ccaagcagac cccagcagaa gaagcgaagt cgtcgccgga gcaggaggaa gagcgagcag caagatgtcg tggcaggcgt acgtcgatga

ccacctgctg tgcgacatcg aaggccagca cctcagcgcc gccgccatcg tcggccacga 240 Cggcagcgtc tgggcacagt ccgagaactt ccccgagtta aagcctgagg aggttgctgg 300 gatgataaag gactttgatg aacctggaac tettgeacea actggtettt ttgttggagg 360 420 tacgAagtac atggtgatcc aaggtgaacc tggagttgtc atccgaggaa agaagggcac tggaggcatt actatcaaga aaactggcat gtccttgatt atcggtatct atgatgagcc 480 aatgactcca gggcaatgca atatggtggt ggagaggctc ggcgattacc tgatcgaaca 540 600 Ggggcttcta agtttgtcat aatgctattt tggtcattgg gcacttaagt ttgcacctca tttggttctg taatatgtgg gcttgtgcat gtgcttggcg tattgcatgc agtgaataat 660 ttatcttcgc gttgggttgg tgacaatgtt gggaacggat ttgaattggg gtttatgctt 720 gccatctcct catatctcga actcagctgc tgtttcactg agtaatgtac atttccctgg 780 taatggtact tgtgcactct gctgctttat ggaaaagagt gcatttt

- (2) INFORMATION FOR SEQ ID NO:3991:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 92 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..92
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579079
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3991:

Arg Pro His Ala Ser Arg Pro Asn Tyr Ala Thr Asp Ile Phe Pro Ser

Thr Pro Val Pro Ala Val Gln Pro Arg His Arg Val Arg Thr Lys Gln
20 25 30

Thr Pro Ala Glu Glu Ala Lys Ser Ser Pro Glu Glu Glu Glu Arg
35 40 45

Ala Ala Arg Cys Arg Gly Arg Arg Thr Ser Met Thr Thr Cys Cys Ala 50 55 60

Thr Ser Lys Ala Ser Thr Ser Ala Pro Pro Pro Ser Ser Ala Thr Thr 65 70 75 80

Ala Ala Ser Gly His Ser Pro Arg Thr Ser Pro Ser 85 90

- (2) INFORMATION FOR SEQ ID NO:3992:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 135 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..135
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579080
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3992:

Met Ser Trp Gln Ala Tyr Val Asp Asp His Leu Leu Cys Asp Ile Glu 1 5 10

Gly Gln His Leu Ser Ala Ala Ala Ile Val Gly His Asp Gly Ser Val 20 25 30

Trp Ala Gln Ser Glu Asn Phe Pro Glu Leu Lys Pro Glu Glu Val Ala 35 40 45

Gly Met Ile Lys Asp Phe Asp Glu Pro Gly Thr Leu Ala Pro Thr Gly 50 55 60

Leu Phe Val Gly Gly Thr Lys Tyr Met Val Ile Gln Gly Glu Pro Gly 65 70 75 80

Val Val Ile Arg Gly Lys Lys Gly Thr Gly Gly Ile Thr Ile Lys Lys 85 90 95

Thr Gly Met Ser Leu Ile Ile Gly Ile Tyr Asp Glu Pro Met Thr Pro 100 105 110

(C) STRANDEDNESS:
 (D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide

```
Gly Gln Cys Asn Met Val Val Glu Arg Leu Gly Asp Tyr Leu Ile Glu
                            120
                                                125
        115
Gln Gly Leu Leu Ser Leu Ser
                     135
    130
(2) INFORMATION FOR SEQ ID NO:3993:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 86 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..86
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579081
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3993:
Met Ile Lys Asp Phe Asp Glu Pro Gly Thr Leu Ala Pro Thr Gly Leu
                                    10
                5
Phe Val Gly Gly Thr Lys Tyr Met Val Ile Gln Gly Glu Pro Gly Val
                                                     30
            20
                                25
Val Ile Arg Gly Lys Lys Gly Thr Gly Gly Ile Thr Ile Lys Lys Thr
                            40
Gly Met Ser Leu Ile Ile Gly Ile Tyr Asp Glu Pro Met Thr Pro Gly
                        55
Gln Cys Asn Met Val Val Glu Arg Leu Gly Asp Tyr Leu Ile Glu Gln
                    70
Gly Leu Leu Ser Leu Ser
                85
(2) INFORMATION FOR SEQ ID NO:3994:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 833 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
           (B) LOCATION: 1..833
           (D) OTHER INFORMATION: / Ceres Seq. ID 1579082
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3994:
atcctagaag gaaacaggaa caggcagctc tgaaagactg aaactcacgg ccatggccat
                                                                        60
                                                                       120
cetgggegee eteaggeteg egeegtetee accegeeete geeggegetg egeeacegge
tacgtcgccg tctgcggctg tacgctcctc cgtgcacttc cacctcgcca atgccggcgc
                                                                       180
                                                                       240
egeegegete ngtegeegee tegeteeteg eegeegaeee egeegtgget tteattggag
                                                                       300
gaggaccgta cgggaagcag gtgacgcggg ggcaggacct caccggcaag gacttcagcg
gccagacact catcaagcag gacttcaaga cgtctatact gaggcaggcg aacttcaaag
                                                                        360
gegegaacet geteggegeg aGettetteg atgeagacet caeaageget gatetetetg
                                                                        420
acgctgatct tagaggcgct gatttgtcgc tggcgaattt aacgaaggca aacttatcaa
                                                                        480
atgccaactt agaaggggca cttgccactg ggaacacttc tttcaaaggt gccgacataa
                                                                        540
ctggggcaga ttttaccgat gtgccgctgc gagatgatca acgggagtac ctctgcaaaa
                                                                        600
tcgctgacgg agtaaattca accactggaa acccaacaaa ggagactctg ttctgcagct
                                                                        660
gatcgacgga aggacctggg acttgtgact tattcaacgt cttgataaac ttgcatctgc
                                                                        720
tgctgtaagc acgtgaggaa tgtaaattga gttatagagg gttcctagaa ataataactg
                                                                        780
gtaattacgt gtaaatcaac caacaataaa agtgtgtgct gccctttgaa tqt
 (2) INFORMATION FOR SEQ ID NO:3995:
      (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 119 amino acids
           (B) TYPE: amino acid
```

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..119
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579083
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3995:
- Met Ala Ile Leu Gly Ala Leu Arg Leu Ala Pro Ser Pro Pro Ala Leu 5 10
- Ala Gly Ala Ala Pro Pro Ala Thr Ser Pro Ser Ala Ala Val Arg Ser 25 20
- Ser Val His Phe His Leu Ala Asn Ala Gly Ala Ala Ala Leu Xaa Arg 40
- Arg Leu Ala Pro Arg Arg Arg Pro Arg Arg Gly Phe His Trp Arg Arg 55
- Thr Val Arg Glu Ala Gly Asp Ala Gly Ala Gly Pro His Arg Gln Gly 75 70
- Leu Gln Arg Pro Asp Thr His Gln Ala Gly Leu Gln Asp Val Tyr Thr 85 90
- Glu Ala Gly Glu Leu Gln Arg Arg Glu Pro Ala Arg Arg Glu Leu Leu 100 105

Arg Cys Arg Pro His Lys Arg 115

- (2) INFORMATION FOR SEQ ID NO:3996:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 163 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..163
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579084
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3996:
- Met Pro Ala Pro Pro Arg Xaa Val Ala Ala Ser Leu Leu Ala Ala Asp 5 10
- Pro Ala Val Ala Phe Ile Gly Gly Gly Pro Tyr Gly Lys Gln Val Thr 20 25
- Arg Gly Gln Asp Leu Thr Gly Lys Asp Phe Ser Gly Gln Thr Leu Ile 40
- Lys Gln Asp Phe Lys Thr Ser Ile Leu Arg Gln Ala Asn Phe Lys Gly 55
- Ala Asn Leu Leu Gly Ala Ser Phe Phe Asp Ala Asp Leu Thr Ser Ala 75 70
- Asp Leu Ser Asp Ala Asp Leu Arg Gly Ala Asp Leu Ser Leu Ala Asn 90 85
- Leu Thr Lys Ala Asn Leu Ser Asn Ala Asn Leu Glu Gly Ala Leu Ala 110 100 105
- Thr Gly Asn Thr Ser Phe Lys Gly Ala Asp Ile Thr Gly Ala Asp Phe 115 120 125
- Thr Asp Val Pro Leu Arg Asp Asp Gln Arg Glu Tyr Leu Cys Lys Ile 130 135 140
- Ala Asp Gly Val Asn Ser Thr Thr Gly Asn Pro Thr Lys Glu Thr Leu 155 150

Phe Cys Ser

- (2) INFORMATION FOR SEQ ID NO:3997:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 871 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..871
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579106
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3997: atcgatcgag cttggttgct cggcagcagc tagcaatggc cgccaaggga ggtgatgagc 60 tgaagctgct gggcgtgtgg aacagcccgt acgtcaacag ggtccagatc gtgctcaacc 120 180 tcaagggcct cagctacgag tacgtggagg aggacctcct cagcaagagc gagctcctcc tcaagtccaa cccggtgcac aagaaagtgc ccgtgctcat ccacgccggc aagccggtcg 240 ccgagtcgca ggccatcatt cagtacctcg acgaggcttt ccccggcggc acgttcccgt 300 eggteeteee ageegaeeee taegeaegtg ceaetgeeeg ettetgggee geettegteg 360 acgacaaggt cgggtctcca tggcacacgg tcctgttcgc gcgggaccac gggaagaagg 420 cggacgcggc gtcgcggatc gtcgcggcgc tggagacgct ggagggcgcg ttcaaggact 480 540 gctccggcgg gagggactac ttcggcggcg gcgCcatcgg cttcgtggac gtggtcctcg gcagctacct gggctggttc aaggtgttcg agaagatggt cggcgtcagg gtcctggacg tggcgaggac gccgctcctc gccgcgtggg gggagcgttt cgccgcggcg gaagcggcca aggacgtcct gccggatgac gttgacaagg tgctcgagtt ccttcagaag ttcctggact aggtgcgcgc cagcgccacc atgtgctccg gtgtccaact cccaatgttt gtttgctttg 780 gtcattttcg gtgcgctgtt aatggccctc agatgtttgc cagttgattt tatagaatta agagctaatt tggtaatcac atttttttc g
- (2) INFORMATION FOR SEQ ID NO:3998:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 239 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..239
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579107
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3998:
- Gly Asp Glu Leu Lys Leu Leu Gly Val Trp Asn Ser Pro Tyr Val Asn 20 25 30
- Arg Val Gln Ile Val Leu Asn Leu Lys Gly Leu Ser Tyr Glu Tyr Val 35 40 45
- Glu Glu Asp Leu Leu Ser Lys Ser Glu Leu Leu Leu Lys Ser Asn Pro
 50 55 60
- Val His Lys Lys Val Pro Val Leu Ile His Ala Gly Lys Pro Val Ala 65 70 75 80
- Glu Ser Gln Ala Ile Ile Gln Tyr Leu Asp Glu Ala Phe Pro Gly Gly 85 90 95
- Thr Phe Pro Ser Val Leu Pro Ala Asp Pro Tyr Ala Arg Ala Thr Ala 100 105 110
- Arg Phe Trp Ala Ala Phe Val Asp Asp Lys Val Gly Ser Pro Trp His
- Thr Val Leu Phe Ala Arg Asp His Gly Lys Lys Ala Asp Ala Ala Ser 130 135 140
- Arg Ile Val Ala Ala Leu Glu Thr Leu Glu Gly Ala Phe Lys Asp Cys
 145 150 155 160
- Ser Gly Gly Arg Asp Tyr Phe Gly Gly Gly Ala Ile Gly Phe Val Asp 165 170 175
- Val Val Leu Gly Ser Tyr Leu Gly Trp Phe Lys Val Phe Glu Lys Met 180 185 190
- Val Gly Val Arg Val Leu Asp Val Ala Arg Thr Pro Leu Leu Ala Ala 195 200 205
- Trp Gly Glu Arg Phe Ala Ala Ala Glu Ala Ala Lys Asp Val Leu Pro 210 215 220

Asp Asp Val Asp Lys Val Leu Glu Phe Leu Gln Lys Phe Leu Asp 225 230 235

- (2) INFORMATION FOR SEQ ID NO:3999:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 228 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..228
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579108
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3999:

Met Ala Ala Lys Gly Gly Asp Glu Leu Lys Leu Gly Val Trp Asn 1 5 10 15

Ser Pro Tyr Val Asn Arg Val Gln Ile Val Leu Asn Leu Lys Gly Leu 20 25 30

Ser Tyr Glu Tyr Val Glu Glu Asp Leu Leu Ser Lys Ser Glu Leu Leu 35 40 45

Leu Lys Ser Asn Pro Val His Lys Lys Val Pro Val Leu Ile His Ala

Gly Lys Pro Val Ala Glu Ser Gln Ala Ile Ile Gln Tyr Leu Asp Glu

Ala Phe Pro Gly Gly Thr Phe Pro Ser Val Leu Pro Ala Asp Pro Tyr

85

90

95

Ala Arg Ala Thr Ala Arg Phe Trp Ala Ala Phe Val Asp Asp Lys Val 100 105 110

Gly Ser Pro Trp His Thr Val Leu Phe Ala Arg Asp His Gly Lys Lys 115 120 125

Ala Asp Ala Ala Ser Arg Ile Val Ala Ala Leu Glu Thr Leu Glu Gly
130 135 140

Ala Phe Lys Asp Cys Ser Gly Gly Arg Asp Tyr Phe Gly Gly Gly Ala
145 150 155 160

Ile Gly Phe Val Asp Val Val Leu Gly Ser Tyr Leu Gly Trp Phe Lys
165 170 175

Val Phe Glu Lys Met Val Gly Val Arg Val Leu Asp Val Ala Arg Thr 180 185 190

Pro Leu Leu Ala Ala Trp Gly Glu Arg Phe Ala Ala Ala Glu Ala Ala 195 200 205

Lys Asp Val Leu Pro Asp Asp Val Asp Lys Val Leu Glu Phe Leu Gln 210 215 220

Lys Phe Leu Asp

225

- (2) INFORMATION FOR SEQ ID NO:4000:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 455 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..455
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579116
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4000:

acttoctoc ttottacage egeogeegee geateceage etecateace gttteegtet 60 egttgecate gggaaggtge acggategtt ggegegegee gggaaggtee gegggeagae 120 eeceaaggtg gegaaGeagg acaagaagaa gaageeege ggeegegege acaagaggat 120 geagtacaac egeogetteg teacegeegt egteggette ggeaagaage gegggeeeaa etecteegag aagtaggee egeteggete gtaceggtte etecateette etgeteteeg 300

tatgcttatg ctcttgatgg tactagtttc gttgttcgca agcagaggaa gaaccttctg 360 tagattcggt tttgttgtcc atgtgctcag atgggaactt gagattgtat gaatttgaga 420 tatggtgata tgagctgatg atttttatta tgctt

- (2) INFORMATION FOR SEQ ID NO:4001:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 84 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..84
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579117
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4001:

Leu Pro Pro Phe Leu Gln Pro Pro Pro Pro His Pro Ser Leu His His 1 10 15

Arg Phe Arg Leu Val Ala Met Gly Lys Val His Gly Ser Leu Ala Arg 20 25 30

Ala Gly Lys Val Arg Gly Gln Thr Pro Lys Val Ala Lys Gln Asp Lys 35 40 45

Lys Lys Lys Pro Arg Gly Arg Ala His Lys Arg Met Gln Tyr Asn Arg 50 55 60

Arg Phe Val Thr Ala Val Val Gly Phe Gly Lys Lys Arg Gly Pro Asn 65 70 75 80

Ser Ser Glu Lys

- (2) INFORMATION FOR SEQ ID NO:4002:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 104 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..104
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579118
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4002:

Phe Leu Pro Ser Tyr Ser Arg Arg Arg Ile Pro Ala Ser Ile Thr 1 5 10 15

Val Ser Val Ser Leu Pro Trp Val Arg Cys Thr Asp Arg Trp Arg Ala
20 25 30

Pro Gly Arg Ser Ala Gly Arg Pro Pro Arg Trp Arg Ser Arg Thr Arg 35 40 45

Arg Arg Ser Pro Ala Ala Ala Arg Thr Arg Gly Cys Ser Thr Thr Ala 50 55 60

Ala Ser Ser Pro Pro Ser Ser Ala Ser Ala Arg Ser Ala Gly Pro Thr 65 70 75 80

Pro Pro Arg Ser Arg Arg Ser Ala Arg Thr Gly Ser Ser Ser Phe 85 90 95

Leu Leu Ser Val Cys Leu Cys Ser

100

- (2) INFORMATION FOR SEQ ID NO:4003:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 62 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

ct

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..62
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579119
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4003:
- Met Gly Lys Val His Gly Ser Leu Ala Arg Ala Gly Lys Val Arg Gly 1 5 10 15
- Gln Thr Pro Lys Val Ala Lys Gln Asp Lys Lys Lys Pro Arg Gly 20 25 30
- Arg Ala His Lys Arg Met Gln Tyr Asn Arg Arg Phe Val Thr Ala Val 35 40 45
- Val Gly Phe Gly Lys Lys Arg Gly Pro Asn Ser Ser Glu Lys 50 55 60
- (2) INFORMATION FOR SEQ ID NO:4004:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 662 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..662
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579128
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4004: agtatccggt agggttttcc tctcgcgccg ccgcggaaca caacaccgca ccacactacc 60 120 cageggaate egeceaeceg caeceggage agaggagata tgtegeaggg gaagggagga 180 gcgtcgagga aggaggaggt ggtcaccagg gagtacacca tcaacctcca caagcgcctc cacggctgca cattcaagaa gaaggcaccc aacgccatca aggagatcag gaagtttgcg 240 cagaaggcca tgggcaccac ggacattagg attgatgtga agctcaacaa gcacatctgg 300 agcagcggga tcaggagcgt gccgcggagg gttcgtgtga ggatcgcccg caagaggaac 360 gacgaggagg atgccaagga ggagctctac tcccttgtca ccgtcgcgga gatccccgcc 420 gagggettaa aagggetggg gaccaaggte gttgacgata eegattaage tgtegegtta 480 tctacatctt tagagagttc ctagtttgta tttgcaacag caaaaccttt tgtattcaca 540 aagttgtcta tttccgcaac agaattgcat ggctagtttt cttttcattg ctgctGgcat 600 cettttette attategece eetgggaagt egetgeteat gggacaagtt tggaaatete 660
- (2) INFORMATION FOR SEQ ID NO:4005:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 92 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..92
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579129
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4005:
- Val Ser Gly Arg Val Phe Leu Ser Arg Arg Gly Thr Gln His Arg

 1 5 10 15
- Thr Thr Leu Pro Ser Gly Ile Arg Pro Pro Ala Pro Gly Ala Glu Glu 20 25 30
- Ile Cys Arg Arg Gly Arg Glu Glu Arg Arg Gly Arg Arg Arg Trp Ser 35 40 45
- Pro Gly Ser Thr Pro Ser Thr Ser Thr Ser Ala Ser Thr Ala Ala His 50 55 60
- Ser Arg Arg Arg His Pro Thr Pro Ser Arg Arg Ser Gly Ser Leu Arg 65 70 75 80
- Arg Arg Pro Trp Ala Pro Arg Thr Leu Gly Leu Met
 85 90
- (2) INFORMATION FOR SEQ ID NO:4006:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 88 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..88
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579130
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4006:

Tyr Pro Val Gly Phe Ser Ser Arg Ala Ala Glu His Asn Thr Ala 1 5 10 15

Pro His Tyr Pro Ala Glu Ser Ala His Pro His Pro Glu Gln Arg Arg 20 25 30

Tyr Val Ala Gly Glu Gly Arg Ser Val Glu Glu Gly Gly Gly His 35 40 45

Gln Gly Val His His Gln Pro Pro Gln Ala Pro Pro Arg Leu His Ile 50 55 60

Gln Glu Glu Gly Thr Gln Arg His Gln Gly Asp Gln Glu Val Cys Ala 65 70 75 80

Glu Gly His Gly His His Gly His

- (2) INFORMATION FOR SEQ ID NO:4007:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 122 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..122
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579131
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4007:

Met Ser Gln Gly Lys Gly Gly Ala Ser Arg Lys Glu Glu Val Val Thr
1 5 10 15

Arg Glu Tyr Thr Ile Asn Leu His Lys Arg Leu His Gly Cys Thr Phe 20 25 30

Lys Lys Lys Ala Pro Asn Ala Ile Lys Glu Ile Arg Lys Phe Ala Gln 35 40 45

Lys Ala Met Gly Thr Thr Asp Ile Arg Ile Asp Val Lys Leu Asn Lys 50 55 60

His Ile Trp Ser Ser Gly Ile Arg Ser Val Pro Arg Arg Val Arg Val 65 70 75 80

Arg Ile Ala Arg Lys Arg Asn Asp Glu Glu Asp Ala Lys Glu Glu Leu 85 90 95

Tyr Ser Leu Val Thr Val Ala Glu Ile Pro Ala Glu Gly Leu Lys Gly
100
105
110
Leu Cly Thr Lys Val Val Asp Asp Thr Asp

Leu Gly Thr Lys Val Val Asp Asp Thr Asp 115 120

- (2) INFORMATION FOR SEQ ID NO:4008:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1051 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..1051

(D) OTHER INFORMATION: / Ceres Seq. ID 1579182

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4008:						
aatccaacga actgaccaca actacctaag ctaaaagcta accaccgtac ccccggcca	60					
ggcgctcgcg cccacctccg ctgccgtgct caagaccccg ttcctcgggg ccaggcgcg	120					
gctcgccaag cccgcgcctc gccgcgcgct cgtcatcgcc gccgcggccg ccgccaaga	a 180					
gtcgtggatc ccggccatca agagcgacgc cgagatcgtc aacccgccct ggctcgacg	g 240					
ctcgctcccc ggcgacttcg ggttcgaccc gctggggctg ggcaaggacc cggcgttcc	300					
caagtggtac cgggaggcgg astgatccac gggcggtggg cgatggcggc cgtgctggg	360					
atcttcgtgg ggcaggcgtg gagcggcatc ccgtggttcg argccggcgc ggacccgag	420					
gccatcgcgc ccttctCctt cgggtcgctg ctgggcacgc agctgctgct gatggggtg	g 480					
gtggagtcga agcggtgggt ggacttcttc aacccggact cccaggccgt ggagtgggc	540					
acgccgtggt cgcgcaccgc tgagaacttc gccaacttca ccggcgagca gggctaccc						
ggcggcaagt tettegacee geteggeete geeggeaceg teaaggaegg egtetacat						
cccgacgtcg acaagctcga gcggctcaag ctggccgaga tcaagcacgc ccgcatcgc						
atgettgeea tgetegeett etaettegag geegggeagg geaagaegee geteggege	g 780					
ctcggcctat gatttgcatg ctgccggcga ccgagtcagt tctcgattgc gcggggtgg	g 840					
tgagctccta gggacgtacg gctgcagcgg atcagacgcc ttgcctcgca gattggagg	2 900					
gaaagaagag cgtagcagca atctactgtc tgtgttggtg gtttagcgtg cgtgaacca	g 960					
atggggtgtt cctctctgtt ttttctttct ttctttct	a 1020					
tgtatagtat ggatcgattt tcattgcatt g						

- (2) INFORMATION FOR SEQ ID NO:4009:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 88 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..88
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579183
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4009:

 Met Ala Leu Ala Pro Thr Ser Ala Ala Val Leu Lys Thr Pro Phe Leu

 1
 5
 10
 15

 Gly Ala Arg Arg Ala Leu Ala Lys Pro Ala Pro Arg Arg Ala Leu Val
 20
 25
 30

 Ile Ala Ala Ala Ala Ala Ala Ala Lys Lys Ser Trp Ile Pro Ala Ile Lys
 45

 Ser Asp Ala Glu Ile Val Asn Pro Pro Trp Leu Asp Gly Ser Leu Pro
 50

 Gly Asp Phe Gly Phe Asp Pro Leu Gly Leu Gly Lys Asp Pro Ala Phe

 65
 70

 Leu Lys Trp Tyr Arg Glu Ala Xaa
- Leu Lys Trp Tyr Arg Glu Ala Xaa 85
- (2) INFORMATION FOR SEQ ID NO:4010: (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 149 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..149
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579184
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4010:
- Met Ala Ala Val Leu Gly Ile Phe Val Gly Gln Ala Trp Ser Gly Ile 1 5 10 15
- Pro Trp Phe Xaa Ala Gly Ala Asp Pro Ser Ala Ile Ala Pro Phe Ser 20 25 30
- Phe Gly Ser Leu Leu Gly Thr Gln Leu Leu Met Gly Trp Val Glu

60

120

180

240

300

360

420

480

```
40
                                                45
        35
Ser Lys Arg Trp Val Asp Phe Phe Asn Pro Asp Ser Gln Ala Val Glu
                        55
Trp Ala Thr Pro Trp Ser Arg Thr Ala Glu Asn Phe Ala Asn Phe Thr
                                        75
                    70
Gly Glu Gln Gly Tyr Pro Gly Gly Lys Phe Phe Asp Pro Leu Gly Leu
                                    90
Ala Gly Thr Val Lys Asp Gly Val Tyr Ile Pro Asp Val Asp Lys Leu
                                105
            100
Glu Arg Leu Lys Leu Ala Glu Ile Lys His Ala Arg Ile Ala Met Leu
                                                125
                           120
Ala Met Leu Ala Phe Tyr Phe Glu Ala Gly Gln Gly Lys Thr Pro Leu
                        135
Gly Ala Leu Gly Leu
145
(2) INFORMATION FOR SEQ ID NO:4011:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 106 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..106
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579185
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4011:
Met Gly Trp Val Glu Ser Lys Arg Trp Val Asp Phe Phe Asn Pro Asp
                                    10
Ser Gln Ala Val Glu Trp Ala Thr Pro Trp Ser Arg Thr Ala Glu Asn
                                 25
            20
Phe Ala Asn Phe Thr Gly Glu Gln Gly Tyr Pro Gly Gly Lys Phe Phe
                             40
Asp Pro Leu Gly Leu Ala Gly Thr Val Lys Asp Gly Val Tyr Ile Pro
                        55
Asp Val Asp Lys Leu Glu Arg Leu Lys Leu Ala Glu Ile Lys His Ala
                                        75
                    70
Arg Ile Ala Met Leu Ala Met Leu Ala Phe Tyr Phe Glu Ala Gly Gln
                                     90
                85
Gly Lys Thr Pro Leu Gly Ala Leu Gly Leu
            100
(2) INFORMATION FOR SEQ ID NO:4012:
     (i) SEQUENCE CHARACTERISTICS:
           (A) LENGTH: 760 base pairs
           (B) TYPE: nucleic acid
           (C) STRANDEDNESS: single
           (D) TOPOLOGY: linear
     (ii) MOLECULE TYPE: DNA (genomic)
     (ix) FEATURE:
           (A) NAME/KEY: -
           (B) LOCATION: 1..760
           (D) OTHER INFORMATION: / Ceres Seq. ID 1579249
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4012:
atgaggaggc aagtrogcag gaggccaata aaaagaacaa gaaaaagaag gcacatgata
taagcagaag tgaaagtcag gcaggaactg gacttggtga gtcagatagc aaggaaccac
tccaaacacg gacgtttgcc aatggtatga tgattcagga gttagagatg ggcaaacctg
 atggtaaaaa ggccagccgt gggaagaagg tttctgttag atatattggc aagctaaaga
 atggcactat tttcgactcc aacgtcagtg gaagaccttt tgagtttaga ctaggtgttg
 ggcaggttat cagtggctgg gacgttggcg tcaatggtat gcgggttggg gacaaaagga
```

gactcaccat tccaccttcc atggggtatg ggagcaaaag agtggggcag ataccacaga

actcaactct catcttcgat gtggagctgg tgaacgtaaa atgaagtgag aagatccacg

agaaactgcg gcagtttcac aaattttGct acgcatcatt tteettggge aatgctgtt 540 cgtaggcata ggggcatgtt aagtggatte atetetgteg etateatact ttegaactga 600 gtttcagaag gaaaaaaact gtggactgtt gccatctggg ataatteetg ggetgcagea 660 ttegecatee tteteecggt teetteaggg teattttgac attettgtga taccetcaga 720 accttttgaa etgatgaaat ggttaaggtg gagtacgtge

- (2) INFORMATION FOR SEQ ID NO: 4013:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 153 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..153
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579250
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4013:

Glu Glu Ala Ser Xaa Gln Glu Ala Asn Lys Lys Asn Lys Lys Lys 10 15

Ala His Asp Ile Ser Arg Ser Glu Ser Gln Ala Gly Thr Gly Leu Gly 20 25 30

Glu Ser Asp Ser Lys Glu Pro Leu Gln Thr Arg Thr Phe Ala Asn Gly 35 40

Met Met Ile Gln Glu Leu Glu Met Gly Lys Pro Asp Gly Lys Lys Ala 50 55 60

Ser Arg Gly Lys Lys Val Ser Val Arg Tyr Ile Gly Lys Leu Lys Asn 70 75 80

Gly Thr Ile Phe Asp Ser Asn Val Ser Gly Arg Pro Phe Glu Phe Arg 85 90 95

Leu Gly Val Gly Gln Val Ile Ser Gly Trp Asp Val Gly Val Asn Gly 100 105

Met Arg Val Gly Asp Lys Arg Arg Leu Thr Ile Pro Pro Ser Met Gly
115 120 125

Tyr Gly Ser Lys Arg Val Gly Gln Ile Pro Gln Asn Ser Thr Leu Ile 130 135 140

Phe Asp Val Glu Leu Val Asn Val Lys

- (2) INFORMATION FOR SEQ ID NO:4014:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 105 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..105
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579251
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4014:

Met Met Ile Gln Glu Leu Glu Met Gly Lys Pro Asp Gly Lys Lys Ala 1 5 10 15

Ser Arg Gly Lys Lys Val Ser Val Arg Tyr Ile Gly Lys Leu Lys Asn 20 25 30

Gly Thr Ile Phe Asp Ser Asn Val Ser Gly Arg Pro Phe Glu Phe Arg 35 40 45

Leu Gly Val Gly Gln Val Ile Ser Gly Trp Asp Val Gly Val Asn Gly 50 55 60

Met Arg Val Gly Asp Lys Arg Arg Leu Thr Ile Pro Pro Ser Met Gly 65 70 75 80

Tyr Gly Ser Lys Arg Val Gly Gln Ile Pro Gln Asn Ser Thr Leu Ile
85 90 95

Phe Asp Val Glu Leu Val Asn Val Lys 100 105

- (2) INFORMATION FOR SEQ ID NO:4015:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 104 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..104
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579252
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4015:

Met Ile Gln Glu Leu Glu Met Gly Lys Pro Asp Gly Lys Lys Ala Ser 1 5 10 15

Arg Gly Lys Lys Val Ser Val Arg Tyr Ile Gly Lys Leu Lys Asn Gly 20 25 30

Thr Ile Phe Asp Ser Asn Val Ser Gly Arg Pro Phe Glu Phe Arg Leu 35 40 45

Gly Val Gly Gln Val Ile Ser Gly Trp Asp Val Gly Val Asn Gly Met 50 55 60

Arg Val Gly Asp Lys Arg Arg Leu Thr Ile Pro Pro Ser Met Gly Tyr
65 70 75 80

Gly Ser Lys Arg Val Gly Gln Ile Pro Gln Asn Ser Thr Leu Ile Phe 85 90 95

Asp Val Glu Leu Val Asn Val Lys

- (2) INFORMATION FOR SEQ ID NO:4016:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 525 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..525
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579256
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4016:

acacggatcg aaaacgaatt acccNtcgGt gccctccctc tcggcggcgg cggcgcaagt 60 ccccttcatc tccggcgcgg caaatggcag gcggcagggt tgcacatgct accctcaagg 120 gccccagcgt ggtgaaggag atcttcattg gactgaccct gggtctgatc gctggaggta 180 tgtggaagat gcaccactgg aacgagcaga ggaaaactag atccttctac gacatgcttg 240 acaagggcca gatcagcgtc gtcgtcgagg accaggacga ccagaagcaa gagcagccgc 300 cgctgccgcc cgtatgaatc aaacccgatt ccttgcttgt actagctgct actgctgtta 360 tgtcgccaaa taaagtcgtg tgtgcgtgtg cagtcagtac tactgctctg ctgctactat 420 cctagtccta gtatattagt atattataca gtcctctctg tgaaatttga atcgactcga 480 aaatcaaacc ccaccaatat gagcttgtta atatttgtcc tcccg

- (2) INFORMATION FOR SEQ ID NO:4017:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 72 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..72
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579257
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4017:

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
His Gly Ser Lys Thr Asn Tyr Xaa Ser Val Pro Ser Leu Ser Ala Ala
                                    10
Ala Ala Gln Val Pro Phe Ile Ser Gly Ala Ala Asn Gly Arg Arg Gln
            2.0
                                2.5
Gly Cys Thr Cys Tyr Pro Gln Gly Pro Gln Arg Gly Glu Gly Asp Leu
                            40
His Trp Thr Asp Pro Gly Ser Asp Arg Trp Arg Tyr Val Glu Asp Ala
                        55
Pro Leu Glu Arg Ala Glu Glu Asn
                   70
(2) INFORMATION FOR SEQ ID NO:4018:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 104 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..104
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579258
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4018:
Thr Asp Arg Lys Arg Ile Thr Xaa Arg Cys Pro Pro Ser Arg Arg
```

5 1.0

Arg Arg Lys Ser Pro Ser Ser Pro Ala Arg Gln Met Ala Gly Gly Arg 25 20

Val Ala His Ala Thr Leu Lys Gly Pro Ser Val Val Lys Glu Ile Phe 40

Ile Gly Leu Thr Leu Gly Leu Ile Ala Gly Gly Met Trp Lys Met His 55

His Trp Asn Glu Gln Arg Lys Thr Arg Ser Phe Tyr Asp Met Leu Asp 75 70

Lys Gly Gln Ile Ser Val Val Val Glu Asp Gln Asp Asp Gln Lys Gln 85 90

Glu Gln Pro Pro Leu Pro Pro Val 100

- (2) INFORMATION FOR SEQ ID NO:4019:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1...77
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579259
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4019:

Met Ala Gly Gly Arg Val Ala His Ala Thr Leu Lys Gly Pro Ser Val 10 5

Val Lys Glu Ile Phe Ile Gly Leu Thr Leu Gly Leu Ile Ala Gly Gly 20 25

Met Trp Lys Met His His Trp Asn Glu Gln Arg Lys Thr Arg Ser Phe 45 40

Tyr Asp Met Leu Asp Lys Gly Gln Ile Ser Val Val Val Glu Asp Gln 55

Asp Asp Gln Lys Gln Glu Gln Pro Pro Leu Pro Pro Val 70

- (2) INFORMATION FOR SEQ ID NO:4020:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 906 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..906
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579263
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4020:

attatctatt	tatctcgtag	tatctcttct	taacagaacc	cctataaatt	ccctacgatc	60
		cacttttcct				120
		gggcaagcaa				180
ctcacctacc	tcatcacctc	ctccggcggc	ctcatcttcg	gatacgacat	tggcatctca	240
		cccgttcttg				300
		caaccagtac				360
ttcacctcct	cactctacct	cgcggcgctc	gtcgcctccc	tcttcgccgg	ctacatcacc	420
		gtccatgctc				480
		gaacgtggcc				540
		tcagccggat				600
		ggccttttta				660
		gcactgtaga				720
ctggaagagc	atgcactgcc	agaagctcct	agatttattt	ntcacttacg	ttttttcagt	780
gctagccagt	atttcacatt	tctacttacg	gttatttttg	aaccgtcatc	acaaatggtt	840
		aaaaatagca				900
aaqtqq	-					

- (2) INFORMATION FOR SEQ ID NO:4021:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..175
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579264
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4021:

Met Ala Gly Gly Ala Phe Thr Glu Lys Gly Lys Gln Tyr Pro Gly Lys 1 $$ 5 $$ 10 $$ 15 Met Thr Val Phe Val Phe Leu Ala Cys Leu Val Ala Ser Ser Gly Gly

20 25 30 Leu Ile Phe Gly Tyr Asp Ile Gly Ile Ser Gly Gly Val Thr Ser Met

35 40 45
Asp Pro Phe Leu Lys Arg Phe Phe Pro Ser Val Tyr Ala Lys Glu Gln

50 55 60 Glu Val Val Glu Thr Asn Gln Tyr Cys Lys Phe Asp Ser Val Leu Leu 65 70 75 80

Thr Leu Phe Thr Ser Ser Leu Tyr Leu Ala Ala Leu Val Ala Ser Leu 85 90 95

Phe Ala Gly Tyr Ile Thr Lys Arg Cys Gly Arg Arg Val Ser Met Leu 100 105 110

Gly Gly Ala Ile Phe Leu Val Gly Ala Val Leu Asn Gly Leu Ala 115 120 125

Gln Asn Val Ala Met Leu Ile Ile Gly Arg Ile Phe Leu Gly Ile Gly 130 135 140

Val Gly Phe Ser Asn Gln Pro Asp Ala Trp Ile Cys Val Ala Ile Tyr 145 150 155 160 Phe Trp Asn Arg Phe Ser Asp Arg Leu Ala Phe Leu Ala Gly Asn

170

- 165
 (2) INFORMATION FOR SEQ ID NO:4022:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..159
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579265
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4022:

Met Thr Val Phe Val Phe Leu Ala Cys Leu Val Ala Ser Ser Gly Gly
1 10 15

Leu Ile Phe Gly Tyr Asp Ile Gly Ile Ser Gly Gly Val Thr Ser Met 20 25 30

Asp Pro Phe Leu Lys Arg Phe Phe Pro Ser Val Tyr Ala Lys Glu Gln 35 40 45

Glu Val Val Glu Thr Asn Gln Tyr Cys Lys Phe Asp Ser Val Leu Leu 50 55 60

Thr Leu Phe Thr Ser Ser Leu Tyr Leu Ala Ala Leu Val Ala Ser Leu 65 70 75 80

Phe Ala Gly Tyr Ile Thr Lys Arg Cys Gly Arg Arg Val Ser Met Leu 85 90 95

Gly Gly Gly Ala Ile Phe Leu Val Gly Ala Val Leu Asn Gly Leu Ala 100 105 110

Gln Asn Val Ala Met Leu Ile Ile Gly Arg Ile Phe Leu Gly Ile Gly 115 120 125

Val Gly Phe Ser Asn Gln Pro Asp Ala Trp Ile Cys Val Ala Ile Tyr 130 135 140

Phe Trp Asn Arg Phe Ser Asp Arg Leu Ala Phe Leu Ala Gly Asn 145 150 155

- (2) INFORMATION FOR SEQ ID NO:4023:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..128
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579266
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4023:

Met Asp Pro Phe Leu Lys Arg Phe Phe Pro Ser Val Tyr Ala Lys Glu 1 10 15

Gln Glu Val Val Glu Thr Asn Gln Tyr Cys Lys Phe Asp Ser Val Leu 20 25 30

Leu Thr Leu Phe Thr Ser Ser Leu Tyr Leu Ala Ala Leu Val Ala Ser 35 40 45

Leu Phe Ala Gly Tyr Ile Thr Lys Arg Cys Gly Arg Arg Val Ser Met 50 55 60

Leu Gly Gly Gly Ala Ile Phe Leu Val Gly Ala Val Leu Asn Gly Leu 65 70 75 80

Ala Gln Asn Val Ala Met Leu Ile Ile Gly Arg Ile Phe Leu Gly Ile 85 90 95

Gly Val Gly Phe Ser Asn Gln Pro Asp Ala Trp Ile Cys Val Ala Ile 100 105 110

Tyr Phe Trp Asn Arg Phe Ser Asp Arg Leu Ala Phe Leu Ala Gly Asn 115 120 125

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 783 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..783
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579270
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4024: atgtgtgtgt cccaacagct gagtggcatg gacatggacc aaaggcttca gtgcatgttt aagagagtcc gggagaccta cgacgctgcg acagaaggca tcaagacaaa ctactatggc 120 ataaagcatg tgatcgaagc cttgctgcct ctgcttcaag cttcctccga tgggaggatc 180 240 gttaacgtct cctctgagtt cggcctgcta aggctgatca acaacgagga gctaaggcag 300 gagctaaacg acgtggagan gctcaccgar gagargctgg acgargtgct ggccgcgtac 360 ctgaragact tcgacgccvr cnargtkggg gcrcgcgggt kgccggtgga cttctcggcc tacaargtgg ccaaggtggc catgaacgcg tacacgagga tcctagcgag gaggcacccS 420 gggstgcgcg tcaactgcgc gcaccccggc tacgtgagca ccgacatgac cgtccacacc 480 gggcytytca cgcccgagca aggcgcggcc aacgtcgtga aggtggcgct gatgccggag 540 ggcggcccga ccggcgcgta cttcgcgttg ggagaggagg cgtcctttgt gtgacgaaag 600 caccgtcgtc gttaagttcg tcgttgttcg ccaactccct gtcagtcgat ttctaaatcg 660 acgtacaatg aaatacatca tcgctgcaaa ctcacaaatg aaaacagtta agggaacctt 720 780 ttqtaqcaaa aaaaaaagtg gacagaataa tgaataatca tgtcaaatat cgcttgagta
- (2) INFORMATION FOR SEQ ID NO:4025:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 197 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..197
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579271
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4025:
- Gln Cys Met Phe Lys Arg Val Arg Glu Thr Tyr Asp Ala Ala Thr Glu 20 25 30
- Gly Ile Lys Thr Asn Tyr Tyr Gly Ile Lys His Val Ile Glu Ala Leu 35 40 45
 Leu Pro Leu Leu Gln Ala Ser Ser Asp Gly Arg Ile Val Asn Val Ser
- 50 55 60 Ser Glu Phe Gly Leu Leu Arg Leu Ile Asn Asn Glu Glu Leu Arg Gln
- 65 70 75 80
 Glu Leu Asn Asp Val Glu Xaa Leu Thr Xaa Glu Xaa Leu Asp Xaa Val
 85 90 95
- Leu Ala Ala Tyr Leu Xaa Asp Phe Asp Ala Xaa Xaa Xaa Gly Xaa Arg
- Gly Xaa Pro Val Asp Phe Ser Ala Tyr Xaa Val Ala Lys Val Ala Met
- Asn Ala Tyr Thr Arg Ile Leu Ala Arg Arg His Xaa Gly Xaa Arg Val 130 135 140
- Asn Cys Ala His Pro Gly Tyr Val Ser Thr Asp Met Thr Val His Thr 145 150 155 160
- Gly Xaa Xaa Thr Pro Glu Gln Gly Ala Ala Asn Val Val Lys Val Ala 165 170 175
- Leu Met Pro Glu Gly Gly Pro Thr Gly Ala Tyr Phe Ala Leu Gly Glu 180 185 190

Glu Ala Ser Phe Val

- (2) INFORMATION FOR SEQ ID NO:4026:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 188 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..188
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579273
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4026:

Met Asp Met Asp Gln Arg Leu Gln Cys Met Phe Lys Arg Val Arg Glu 1 10 15

Thr Tyr Asp Ala Ala Thr Glu Gly Ile Lys Thr Asn Tyr Tyr Gly Ile 20 25 30

Lys His Val Ile Glu Ala Leu Leu Pro Leu Leu Gln Ala Ser Ser Asp 35 40 45 Gly Arg Ile Val Asn Val Ser Ser Glu Phe Gly Leu Leu Arg Leu Ile

Gly Arg Ile Val Asn Val Ser Ser Glu Phe Gly Leu Leu Arg Leu Ile
50 55 60

Asn Asn Glu Glu Leu Arg Gln Glu Leu Asn Asp Val Glu Xaa Leu Thr 65 70 75 80 Xaa Glu Xaa Leu Asp Xaa Val Leu Ala Ala Tyr Leu Xaa Asp Phe Asp

85 90 95
Ala Xaa Xaa Xaa Gly Xaa Arg Gly Xaa Pro Val Asp Phe Ser Ala Tyr

100 105 110 Xaa Val Ala Lys Val Ala Met Asn Ala Tyr Thr Arg Ile Leu Ala Arg

115 120 125
Arg His Xaa Gly Xaa Arg Val Asn Cys Ala His Pro Gly Tyr Val Ser
130 135 140

130 135 140
Thr Asp Met Thr Val His Thr Gly Xaa Xaa Thr Pro Glu Gln Gly Ala
145 150 155 160

Ala Asn Val Val Lys Val Ala Leu Met Pro Glu Gly Gly Pro Thr Gly
165 170 175

Ala Tyr Phe Ala Leu Gly Glu Glu Ala Ser Phe Val

- (2) INFORMATION FOR SEQ ID NO:4027:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 655 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..655
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579274

acqtqtacat tqcatccatc ttggttccaa tggacatata gctcctgttg ctcct

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4027:

cactaccacc agtaccacac cactccgcgc tastgaggac ggtacagcgg cacagaggtg 60 cgacgtacga cgacgacgac gcargcgcca cacatggcat cccagctctc cgccgccgtg 120 ccccggttcc acggcctccg gggctacgcc gcgcccaggt ccgcggtggc agcgctgccg 180 tccqtgaggg tgggcaggaa gaggtcgtcg tcgcagggca tccgctgcga ctacatybgC 240 300 teegecacea acetgateat ggtgaegaeg aegaegetga tgetgttege rgggeggtte 360 GqqctqqCqc cqtcqqCqaa ccgcaaggcg acggcggggc tgaagctgga ggcgcgcgac teeggeetge agacgggtga eeeegeeggg tteaceeteg eegacaeget gGCetgegge 420 gccgtcggcc acatcctcgg cgtcggcatc gtgctcgggc tcaagaacac cggcgccctc 480 gaccagatca teggetagat ecetaegteg tegttgttaa gateagaete ageageeteg 540 atcgcgccgc cggccggcag gtgcctgcag gtggtgactt tgtaacgtgt gtgcgtgcgt 600

- (2) INFORMATION FOR SEQ ID NO:4028:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..125
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579275
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4028:

Leu Pro Pro Val Pro His His Ser Ala Leu Xaa Arg Thr Val Gln Arg 1 5 10 15

His Arg Gly Ala Thr Tyr Asp Asp Asp Asp Ala Xaa Ala Thr His Gly 20 25 30

Ile Pro Ala Leu Arg Arg Arg Ala Pro Val Pro Arg Pro Pro Gly Leu 35 40

Arg Arg Ala Gln Val Arg Gly Gly Ser Ala Ala Val Arg Glu Gly Gly 50 60

Gln Glu Glu Val Val Val Ala Gly His Pro Leu Arg Leu His Xaa Leu
70 75 80

Arg His Gln Pro Asp His Gly Asp Asp Asp Asp Ala Asp Ala Val Arg 85 90 95

Xaa Ala Val Arg Ala Gly Ala Val Gly Glu Pro Gln Gly Asp Gly Gly
100 105 110

Ala Glu Ala Gly Gly Ala Arg Leu Arg Pro Ala Asp Gly 115 120 125

- (2) INFORMATION FOR SEQ ID NO:4029:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 134 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..134
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579276
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4029:

Met Ala Ser Gln Leu Ser Ala Ala Val Pro Arg Phe His Gly Leu Arg 1 5 10 15

Gly Tyr Ala Ala Pro Arg Ser Ala Val Ala Ala Leu Pro Ser Val Arg
20 25 30

Val Gly Arg Lys Arg Ser Ser Gln Gly Ile Arg Cys Asp Tyr Xaa 35 40 45

Xaa Ser Ala Thr Asn Leu Ile Met Val Thr Thr Thr Thr Leu Met Leu 50 55 60

Phe Xaa Gly Arg Phe Gly Leu Ala Pro Ser Ala Asn Arg Lys Ala Thr 65 70 75 80

Ala Gly Leu Lys Leu Glu Ala Arg Asp Ser Gly Leu Gln Thr Gly Asp 85 90 95

Pro Ala Gly Phe Thr Leu Ala Asp Thr Leu Ala Cys Gly Ala Val Gly
100 105 110

His Ile Leu Gly Val Gly Ile Val Leu Gly Leu Lys Asn Thr Gly Ala 115 120 125

Leu Asp Gln Ile Ile Gly

- (2) INFORMATION FOR SEQ ID NO:4030:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 79 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..79
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579277
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4030:

Met Val Thr Thr Thr Leu Met Leu Phe Xaa Gly Arg Phe Gly Leu
1 5 10 15

Ala Pro Ser Ala Asn Arg Lys Ala Thr Ala Gly Leu Lys Leu Glu Ala 20 25 30

Arg Asp Ser Gly Leu Gln Thr Gly Asp Pro Ala Gly Phe Thr Leu Ala 35 40 45

Asp Thr Leu Ala Cys Gly Ala Val Gly His Ile Leu Gly Val Gly Ile 50 55 60

Val Leu Gly Leu Lys Asn Thr Gly Ala Leu Asp Gln Ile Ile Gly 65 70 75

- (2) INFORMATION FOR SEQ ID NO:4031:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 851 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..851
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579278
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4031:

ctccccaatc cccaggtcct catcggcctc ctctctctcg gtctcgccag atctccccac ggaaccetae cegageatea gecatggeaa tegeggegeg egecetgege egecteeege 120 ttcacctctc cccctcgatc tcccgctcct tctgcgcggt ttccccggcc gccgcctcgg 180 240 ctacctcggc ccccgccgcc gcgtccgcca aggtcgctga ccgcatcgtg cgcgtcctcg 300 ccatcgatcc cgacggggcq cgccgcgatg tggtcggcct ctcggggcag acactccttc 360 gegetetage caacqcqqqG etcatcqage eggeetecca eegeetegag gatategaeg 420 cqtqCtccqc cqaqtqcqaq qtccacatcq cqcaqgagtq gcttgacaag ctgccaccac 480 cqtcctacqa qqaqcqatac qtqctcacqc qcgcgtccaq gaaccgcgag ctcaacaagy 540 acqcqcqcct qqqctqccaq qtcqtcctcq cgccggagct gcaggggatg gtcgtcgcca teccegagee taageegtgg gacateeeat aatggeetge egacgaaagg taaggtgegg 600 660 cttttgacgc tgtgagcctt ccttaattcc cttggctcgg tcaagctgtg cgcctgtgcc atcccctttt atatgttacg gatttagtga agaataataa tttgatgagc aaaacttggc 720 attgqttaac ttttgttcct agtatatgga tgctctaatg tggaatcctt ttgcaactac cgcagtttaa tgtttcatgg tttgaagttt tgtacattgt gatgaatggt tgattaatct 840 tttcatttcc t

- (2) INFORMATION FOR SEQ ID NO:4032:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 204 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..204
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579279
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4032:

Leu Pro Asn Pro Gln Val Leu Ile Gly Leu Leu Ser Leu Gly Leu Ala
1 5 10 15

Arg Ser Pro His Gly Thr Leu Pro Glu His Gln Pro Trp Gln Ser Arg

20 2.5 Arg Ala Pro Cys Ala Ala Ser Arg Phe Thr Ser Pro Pro Arg Ser Pro 40 45 Ala Pro Ser Ala Arg Phe Pro Arg Pro Pro Pro Arg Leu Pro Arg Pro Pro Pro Pro Arg Pro Pro Arg Ser Leu Thr Ala Ser Cys Ala Ser Ser 70 75 Pro Ser Ile Pro Thr Gly Arg Ala Ala Met Trp Ser Ala Ser Arg Gly 90 Arg His Ser Phe Ala Leu Trp Pro Thr Arg Gly Ser Ser Ser Arg Pro 100 105 Pro Thr Ala Ser Arg Ile Ser Thr Arg Ala Pro Pro Ser Ala Arg Ser 115 120 Thr Ser Arg Arg Ser Gly Leu Thr Ser Cys His His Arg Pro Thr Arg 135 Ser Asp Thr Cys Ser Arg Ala Arg Pro Gly Thr Ala Ser Ser Thr Xaa 150 155 Thr Arg Ala Trp Ala Ala Arg Ser Ser Ser Arg Arg Ser Cys Arg Gly 165 170 Trp Ser Ser Pro Ser Pro Ser Leu Ser Arg Gly Thr Ser His Asn Gly 180 185 Leu Pro Thr Lys Gly Lys Val Arg Leu Leu Thr Leu 195 200

- (2) INFORMATION FOR SEQ ID NO:4033:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 189 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..189
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579280
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4033:
- Pro Gln Ser Pro Gly Pro His Arg Pro Pro Leu Ser Arg Ser Arg Gln 1 5 10 15
- Ile Ser Pro Arg Asn Pro Thr Arg Ala Ser Ala Met Ala Ile Ala Ala 20 25 30
- Arg Ala Leu Arg Arg Leu Pro Leu His Leu Ser Pro Ser Ile Ser Arg 35 40 45
- Ser Phe Cys Ala Val Ser Pro Ala Ala Ala Ser Ala Thr Ser Ala Pro
 50 55 60
- Ala Ala Ala Ser Ala Lys Val Ala Asp Arg Ile Val Arg Val Leu Ala 65 70 75 80
- Ile Asp Pro Asp Gly Ala Arg Arg Asp Val Val Gly Leu Ser Gly Gln 85 90 95
 Thr Leu Leu Arg Ala Leu Ala Asn Ala Gly Leu Ile Glu Pro Ala Ser
- \$100\$ \$105\$ \$110\$ His Arg Leu Glu Asp Ile Asp Ala Cys Ser Ala Glu Cys Glu Val His
- 115 120 125

 Ile Ala Gln Glu Trp Leu Asp Lys Leu Pro Pro Pro Ser Tyr Glu Glu
 130 135 140
- Arg Tyr Val Leu Thr Arg Ala Ser Arg Asn Arg Glu Leu Asn Lys Xaa 145 150 155 160
- Ala Arg Leu Gly Cys Gln Val Val Leu Ala Pro Glu Leu Gln Gly Met
 165 170 175
- Val Val Ala Ile Pro Glu Pro Lys Pro Trp Asp Ile Pro 180 185
- (2) INFORMATION FOR SEQ ID NO:4034:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..162
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579281
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4034:
- Met Ala Ile Ala Ala Arg Ala Leu Arg Arg Leu Pro Leu His Leu Ser 1 10 15
- Pro Ser Ile Ser Arg Ser Phe Cys Ala Val Ser Pro Ala Ala Ala Ser 20 25 30
- Ala Thr Ser Ala Pro Ala Ala Ala Ser Ala Lys Val Ala Asp Arg Ile 35 40 45
- Val Arg Val Leu Ala Ile Asp Pro Asp Gly Ala Arg Arg Asp Val Val 50 60
- Gly Leu Ser Gly Gln Thr Leu Leu Arg Ala Leu Ala Asn Ala Gly Leu 65 70 75 80
- Ile Glu Pro Ala Ser His Arg Leu Glu Asp Ile Asp Ala Cys Ser Ala 85 90 95
- Glu Cys Glu Val His Ile Ala Gln Glu Trp Leu Asp Lys Leu Pro Pro 100 105 110
- Pro Ser Tyr Glu Glu Arg Tyr Val Leu Thr Arg Ala Ser Arg Asn Arg 115 120 125
- Glu Leu Asn Lys Xaa Ala Arg Leu Gly Cys Gln Val Val Leu Ala Pro 130 140
- Glu Leu Gln Gly Met Val Val Ala Ile Pro Glu Pro Lys Pro Trp Asp 145 150 155 160
- Ile Pro
- (2) INFORMATION FOR SEQ ID NO:4035:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 843 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..843
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579303
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4035:

tottcaccca cattataaag atcctccact togcacttto googcogcot etotocttoo 60 cgagcaggag gcggacaagg taagcagcaa tcgcaggaac cctagcgccg ccgcacccgc 120 aggaatgggt atcgacctcg tcgccggtgg gaggrrkaag aagaccaagc gcactgcgcc 180 caagtotgac gatgtotacc tcAagotoot cgtcaagetc taccgtttcN ttggtcagga 240 ggaccaagag caatttcaac gctgtcattc tcaagaggct tttcatgagt aaaaccaacc 300 gaccaccaat ctccatgcgc cgccttgtca agtttatgga aggaaaggag aagaacattg 360 ctgtcattgt tggcacagtc acagatgaca aaaggatcca ggaggttcca gcaatgaagg 420 480 ttactgccct gaggttcacg gagacagcaa gggccaggat tgtcaatgct ggtggcgagt gcctcacatt tgaccagctt gctcttcgtg ctccacttgg cgagaacacg gtcctcttga 540 600 ggggccccaa gaatgcccgt gaggcagtga ggcactttgg caaggctcct ggagtgccgc 660 acagccacac caagccgtat gtgcgctcca agggaaggaa gttcgagaag gctcgtggca 720 ggaggaacag ccgtggattc aaggtttaaa acaaattgtg gccctccgtg ttsccatcag 780 catmstgcaa ccgttgtgtt tgatcagtcg acagtaatta gtcatcactc tgtaccgaga 840 ttmstagcac aatttgttgt cctggtytga attytsgaag atatttgatg tcgtctccyt

- (2) INFORMATION FOR SEQ ID NO:4036:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..165
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579304
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4036:

Met Ser Thr Ser Ser Ser Ser Ser Ser Thr Val Xaa Leu Val Arg 10

Arg Thr Lys Ser Asn Phe Asn Ala Val Ile Leu Lys Arg Leu Phe Met 20 25

Ser Lys Thr Asn Arg Pro Pro Ile Ser Met Arg Arg Leu Val Lys Phe 40

Met Glu Gly Lys Glu Lys Asn Ile Ala Val Ile Val Gly Thr Val Thr 55

Asp Asp Lys Arg Ile Gln Glu Val Pro Ala Met Lys Val Thr Ala Leu 75 70

Arg Phe Thr Glu Thr Ala Arg Ala Arg Ile Val Asn Ala Gly Glu 90 8.5

Cys Leu Thr Phe Asp Gln Leu Ala Leu Arg Ala Pro Leu Gly Glu Asn 100 105

Thr Val Leu Leu Arg Gly Pro Lys Asn Ala Arg Glu Ala Val Arg His 120 115

Phe Gly Lys Ala Pro Gly Val Pro His Ser His Thr Lys Pro Tyr Val 130 135 140

Arg Ser Lys Gly Arg Lys Phe Glu Lys Ala Arg Gly Arg Arg Asn Ser 150 155

Arg Gly Phe Lys Val

165

- (2) INFORMATION FOR SEQ ID NO:4037:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 134 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..134
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579305
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4037:

Met Ser Lys Thr Asn Arg Pro Pro Ile Ser Met Arg Arg Leu Val Lys 10 5

Phe Met Glu Gly Lys Glu Lys Asn Ile Ala Val Ile Val Gly Thr Val 25 20

Thr Asp Asp Lys Arg Ile Gln Glu Val Pro Ala Met Lys Val Thr Ala 40

Leu Arg Phe Thr Glu Thr Ala Arg Ala Arg Ile Val Asn Ala Gly Gly 55

Glu Cys Leu Thr Phe Asp Gln Leu Ala Leu Arg Ala Pro Leu Gly Glu 75 70

Asn Thr Val Leu Leu Arg Gly Pro Lys Asn Ala Arg Glu Ala Val Arg 90 85

His Phe Gly Lys Ala Pro Gly Val Pro His Ser His Thr Lys Pro Tyr 100 105 110

Val Arg Ser Lys Gly Arg Lys Phe Glu Lys Ala Arg Gly Arg Arg Asn 120

Ser Arg Gly Phe Lys Val

130

- (2) INFORMATION FOR SEQ ID NO:4038:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 124 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..124
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579306
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4038:

Met Arg Arg Leu Val Lys Phe Met Glu Gly Lys Glu Lys Asn Ile Ala 1 5 10 15

Val Ile Val Gly Thr Val Thr Asp Asp Lys Arg Ile Gln Glu Val Pro 20 25 30

Ala Met Lys Val Thr Ala Leu Arg Phe Thr Glu Thr Ala Arg Ala Arg 35 40 45

Ile Val Asn Ala Gly Gly Glu Cys Leu Thr Phe Asp Gln Leu Ala Leu
50 60

Arg Ala Pro Leu Gly Glu Asn Thr Val Leu Leu Arg Gly Pro Lys Asn 70 75 80

Ala Arg Glu Ala Val Arg His Phe Gly Lys Ala Pro Gly Val Pro His 85 90 95

Ser His Thr Lys Pro Tyr Val Arg Ser Lys Gly Arg Lys Phe Glu Lys 100

Ala Arg Gly Arg Arg Asn Ser Arg Gly Phe Lys Val

- (2) INFORMATION FOR SEQ ID NO:4039:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 819 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..819
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579307
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4039:

aaatccccac gaaaacccta aaccctcgct acccggcggc ggctacaagc tcttcgtcgg ttcagcacca tgargccacc ggctagagga ggacgtggtg ggaggggtgg caggttcgat 120 ggcggcggcc tctgtcgcgg cggccgttgc atcgtcccct gcctcaccgt tctcttcctt 180 ctcgcgctcg cgggcttcct cctctggccc gcggacccgg acatetccct ggcccgcctc 240 cacctagogo acgtotocgt cgtggcacgo cctgccgtcg ccgtcactat atCcgccacg 300 ctcaaggttc gcgttcgcaa tcctgacctc ttcgcgctcg actacacccg cctcgacgtc 360 gctatcggct aCcgcggtgc Ggggcttggc cgggtaacat ccggcggcgg acgggtccgg 420 gegegegetg tetegtaegt egaegeeaae etgeageteg aeggeataeg egtegtegag 480 gacgcgatgt acctgctcga ggacctcgcg caaggatccg tgcccttcga caccatcgcc 540 gaggtcgagg gccacctcca cttccttttc ctcagcatcc cggtcaaggg gagaatatct 600 tgcgtaatgc atattaatcc acacaaccaa accatagtac atcaggactg ctatcctgag 660 tgaattgctt atggcgtgga aatgtggaag ggtgtaagct atgttgcctt gcgaatggat 720 cgtttgattt gtttctaacc tttgcttcca gtcgtggttg taaaagtaag aaccaactaa 780 ggggtgtttg aatgtaatta agctaatagt tagttcgct

- (2) INFORMATION FOR SEQ ID NO:4040:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 197 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..197
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579308
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4040:
- Met Xaa Pro Pro Ala Arg Gly Gly Arg Gly Gly Arg Gly Gly Arg Phe 1 10 15
- Asp Gly Gly Leu Cys Arg Gly Gly Arg Cys Ile Val Pro Cys Leu 20 25 30
- Thr Val Leu Phe Leu Leu Ala Leu Ala Gly Phe Leu Leu Trp Pro Ala 35 40 45
- Asp Pro Asp Ile Ser Leu Ala Arg Leu His Leu Ala His Val Ser Val
 50 55 60
- Val Ala Arg Pro Ala Val Ala Val Thr Ile Ser Ala Thr Leu Lys Val
- 65 70 75 80 Arg Val Arg Asn Pro Asp Leu Phe Ala Leu Asp Tyr Thr Arg Leu Asp
- 85 90 95

 Val Ala Ile Gly Tyr Arg Gly Ala Gly Leu Gly Arg Val Thr Ser Gly
 100 105 110
- 100 105 110

 Gly Gly Arg Val Arg Ala Arg Ala Val Ser Tyr Val Asp Ala Asn Leu
 115 120 125
- Gln Leu Asp Gly Ile Arg Val Val Glu Asp Ala Met Tyr Leu Leu Glu
 130 135 140
- Asp Leu Ala Gln Gly Ser Val Pro Phe Asp Thr Ile Ala Glu Val Glu
 145 150 155 160
- Gly His Leu His Phe Leu Phe Leu Ser Ile Pro Val Lys Gly Arg Ile 165 170 175
- Ser Cys Val Met His Ile Asn Pro His Asn Gln Thr Ile Val His Gln 180 185 190

Asp Cys Tyr Pro Glu

195

- (2) INFORMATION FOR SEQ ID NO:4041:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 628 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..628
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579351
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4041:

ataaaaagct gttcttctcc cctcatcgca tacggcatac cacactagaa ccgccgccgc 60 tgccgtttcg cgcaccgtac cctagccctc gtcagcggcg gcttcgagct cctccagcca 120 tgacgttcaa gcggaggaat ggcggacgca acaagcacgg gcgcggccac gtcaagtaca 180 teegetgete caactgegee aagtgetgee eeaaggataa ggetateaag eggttettgg 240 tgaggaacat tgttgagcag gctgccgtga gagatgtgca ggaggcctgt gtacatgatg 300 gatatgttct acccaaattg tatgcaaagg ttcatcactg tgtctcatgc gcaatccatg 360 cgcacattgt ccgtgtccgc tctcgtgaga acaggaggaa ccgtgagccc ccgcagcgct 420 tcagacgccg ggatgatggc ccaaggcctg gtcagggccc gccgcgccca ggcggtgcag 480 ctcctgCagc tgcagctgct gctgctcctc gtacctaagt tctggaatta gtttcggggc 540 ttagttttgt gaaacattac ctgttttgag aaaccattgt tactgtatcc ccttgatgtc 600

(2) INFORMATION FOR SEQ ID NO: 4042:

aaacttttta qcacaatttq tggttctg

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 171 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..171
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579352
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4042:
- Lys Lys Leu Phe Phe Ser Pro His Arg Ile Arg His Thr Thr Leu Glu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$
- Pro Pro Pro Leu Pro Phe Arg Ala Pro Tyr Pro Ser Pro Arg Gln Arg 20 25 30
- Arg Leu Arg Ala Pro Pro Ala Met Thr Phe Lys Arg Arg Asn Gly Gly 35 40
- Arg Asn Lys His Gly Arg Gly His Val Lys Tyr Ile Arg Cys Ser Asn 50 55 60
- Cys Ala Lys Cys Cys Pro Lys Asp Lys Ala Ile Lys Arg Phe Leu Val 65 70 75 80
- Arg Asn Ile Val Glu Gln Ala Ala Val Arg Asp Val Gln Glu Ala Cys 85 90 95
- Val His Asp Gly Tyr Val Leu Pro Lys Leu Tyr Ala Lys Val His His 100 105 110
- Cys Val Ser Cys Ala Ile His Ala His Ile Val Arg Val Arg Ser Arg 115 120 125
- Glu Asn Arg Arg Asn Arg Glu Pro Pro Gln Arg Phe Arg Arg Arg Asp 130 135 140
- Asp Gly Pro Arg Pro Gly Gln Gly Pro Pro Arg Pro Gly Gly Ala Ala 145 150 155 160
- Pro Ala Ala Ala Ala Ala Ala Pro Arg Thr 165 170
- (2) INFORMATION FOR SEQ ID NO:4043:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 132 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..132
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579353
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4043:
- Met Thr Phe Lys Arg Arg Asn Gly Gly Arg Asn Lys His Gly Arg Gly 1 5 10 15
- His Val Lys Tyr Ile Arg Cys Ser Asn Cys Ala Lys Cys Cys Pro Lys 20 25 30
- Asp Lys Ala Ile Lys Arg Phe Leu Val Arg Asn Ile Val Glu Gln Ala 35 40 45
- Ala Val Arg Asp Val Gln Glu Ala Cys Val His Asp Gly Tyr Val Leu 50 55 60
 Pro Lys Leu Tyr Ala Lys Val His His Cys Val Ser Cys Ala Ile His
- 65 70 75 80
 Ala His Ile Val Arg Val Arg Ser Arg Glu Asn Arg Arg Asn Arg Glu
- Ala His lie Val Arg Val Arg Ser Arg Glu Ash Arg Arg Ash Arg Glu
 85 90 95
 Pro Pro Gln Arg Phe Arg Arg Asp Asp Gly Pro Arg Pro Gly Gln
- 100 105 110

 Gly Pro Pro Arg Pro Gly Gly Ala Ala Pro Ala Ala Ala Ala Ala Ala
- 115 120 Ala Pro Arg Thr
 - 130
- (2) INFORMATION FOR SEQ ID NO: 4044:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 85 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..85
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579354
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4044:

Met Cys Arg Arg Pro Val Tyr Met Met Asp Met Phe Tyr Pro Asn Cys

1 10 15

Met Gln Arg Phe Ile Thr Val Ser His Ala Gln Ser Met Arg Thr Leu 20 25 30

Ser Val Ser Ala Leu Val Arg Thr Gly Gly Thr Val Ser Pro Arg Ser 35 40 45

Ala Ser Asp Ala Gly Met Met Ala Gln Gly Leu Val Arg Ala Arg Arg 50 55 60

Ala Gln Ala Val Gln Leu Leu Gln Leu Gln Leu Leu Leu Leu Val 65 70 75 80

Pro Lys Phe Trp Asn 85

(2) INFORMATION FOR SEQ ID NO:4045:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 804 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..804
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579355
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4045:

tttgctgaag tacacccaac aaggcatact cctgtacagt ctcagatttg ggtcggttgt 60 gttgcagcag tcatggcagg cctctttaat gtgcgtgtgc tctcacatat tctttccgtc 120 ggcactctga ccggttattc agttgtatca gcttgtgtga tcacactaag atggaatgac 180 aaaggaacta gtcgtcgctc ccttggaagt atgtcaattt ggcaagaggg tgttctaagt 240 cttgtcatag ttgctctttg tggttttata gtgggacttt gctatcgctt taactatgct 300 atagcettta tggttgtage ttttgtgata getgttgetg ceagtttege tetecagitt 360 420 cqtcaqqtct atgtggatcc acctggcttt tcttgtcctg gggtaccgtt ggttcccatt atttctgttt tcttcaacat ggtcctgttt gctcagctac atgaagaagc gtggtataga 480 tttgtcattc ttagtctcat cgctgtggga gttTatgccg gctatggtca gtacaatgct 540 gttccttcca gctcagaaca ctctactatt ggttaccatg gcgttccttc tgaagccgca 600 tgagctatgt tcatccccgg agttcttcga acatactgta cggtaccaac atacaccatg 660 gtcaccgaag tttgaacctg ttgctttttt cttgatgttt tgcacagtgc atactcttgt 720 agttacgctt agtactccta tatgtagaca gtgaatttcg cagcctgtgt tgtgcccacc 780 acaccattcg tcaggaagct tgcc

- (2) INFORMATION FOR SEQ ID NO:4046:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 200 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..200
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579356
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4046:

Phe Ala Glu Val His Pro Thr Arg His Thr Pro Val Gln Ser Gln Ile

1 5 10 15

Arg Arg Ser Leu Gly Ser Met Ser Ile Trp Gln Glu Gly Val Leu Ser 65 70 75 80

Leu Val Ile Val Ala Leu Cys Gly Phe Ile Val Gly Leu Cys Tyr Arg 85 90 95

Phe Asn Tyr Ala Ile Ala Phe Met Val Val Ala Phe Val Ile Ala Val 100 105 110

Ala Ala Ser Phe Ala Leu Gln Phe Arg Gln Val Tyr Val Asp Pro Pro 115 120 125

Gly Phe Ser Cys Pro Gly Val Pro Leu Val Pro Ile Ile Ser Val Phe 130 135 140

Phe Val Ile Leu Ser Leu Ile Ala Val Gly Val Tyr Ala Gly Tyr Gly
165 170 175

Gln Tyr Asn Ala Val Pro Ser Ser Ser Glu His Ser Thr Ile Gly Tyr 180 185 190

His Gly Val Pro Ser Glu Ala Ala 195 200

- (2) INFORMATION FOR SEQ ID NO:4047:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 176 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..176
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579357
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4047:
 Met Ala Gly Leu Phe Asn Val Arg Val Leu Ser His Ile Leu Ser Val

1 5 10 15 Gly Thr Leu Thr Gly Tyr Ser Val Val Ser Ala Cys Val Ile Thr Leu

20 25 30
Arg Trp Asn Asp Lys Gly Thr Ser Arg Arg Ser Leu Gly Ser Met Ser

35 40 45

Ile Trp Gln Glu Gly Val Leu Ser Leu Val Ile Val Ala Leu Cys Gly

Phe Ile Val Gly Leu Cys Tyr Arg Phe Asn Tyr Ala Ile Ala Phe Met
65 70 75 80

Val Val Ala Phe Val Ile Ala Val Ala Ala Ser Phe Ala Leu Gln Phe
85 90 95

Arg Gln Val Tyr Val Asp Pro Pro Gly Phe Ser Cys Pro Gly Val Pro

Leu Val Pro Ile Ile Ser Val Phe Phe Asn Met Val Leu Phe Ala Gln
115
120
125

Leu His Glu Glu Ala Trp Tyr Arg Phe Val Ile Leu Ser Leu Ile Ala
130
135
140
N. J. Glas Val Turo Ala Cly Tyr Cly Glas Tyr Asp Ala Val Pro Ser Ser

Val Gly Val Tyr Ala Gly Tyr Gly Gln Tyr Asn Ala Val Pro Ser Ser 145 150 155 160

Ser Glu His Ser Thr Ile Gly Tyr His Gly Val Pro Ser Glu Ala Ala 165 170 175

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 130 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..130
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579358
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4048:

Met Ser Ile Trp Gln Glu Gly Val Leu Ser Leu Val Ile Val Ala Leu 1 5 10 15

Cys Gly Phe Ile Val Gly Leu Cys Tyr Arg Phe Asn Tyr Ala Ile Ala 20 25 30

Phe Met Val Val Ala Phe Val Ile Ala Val Ala Ala Ser Phe Ala Leu 35 40 45

Gln Phe Arg Gln Val Tyr Val Asp Pro Pro Gly Phe Ser Cys Pro Gly 50 60

Val Pro Leu Val Pro Ile Ile Ser Val Phe Phe Asn Met Val Leu Phe 65 70 75 80

Ala Gln Leu His Glu Glu Ala Trp Tyr Arg Phe Val Ile Leu Ser Leu 85 90 95

Ile Ala Val Gly Val Tyr Ala Gly Tyr Gly Gln Tyr Asn Ala Val Pro 100 105 110

Ser Ser Ser Glu His Ser Thr Ile Gly Tyr His Gly Val Pro Ser Glu 115 120 125

Ala Ala

130

- (2) INFORMATION FOR SEQ ID NO:4049:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 650 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..650
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579359
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4049:

attattttat cggtgctcga ggttcaggtt tcacgcagkc ggcgagagct ggcagccatg 60 aagargggga gcccatggtc gctgcggctg ctaatttgct gcgcggcaat ggtggccatc qcgcttctcc cccaacaagg aggccaggcc gcttgtttcg tgccgacgcc gggtccagct 180 ccggcaccgc ccggctcctc cgcgacgaac acgaacgact cctccgctgc tcctcggcca 240 gccaagccca gcgcattccc acccccaatg tacggtggtg tcacccccgg cagtctccag ccacacgagt gcggcggccg gtgcgcgggg cggtgctcgg cgacggcgta ccagaagccg 360 tgcctcttct tctgccgcaa gtvCtgcgcg gcgtgcctgt gcgtgccgcc gggcacctac 420 ggcaacaaga acacctgccc ctgctacaac aactggaaga ccaagcgggg aggccccaag tgcccctagt agccctccct ctcggtctac ttgatgagat cttctgttca aaaaatcaaa 540 aggtaagaat ctgtttaacc atctttagat ttcacaaata aaacaggttt caatttatct ttgtagtgaa acgcttgcaa ctcatgtgtg aatctcatcc aatattagtg

- (2) INFORMATION FOR SEQ ID NO:4050:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 162 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide

- (B) LOCATION: 1..162
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579360
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4050:
- Ile Ile Leu Ser Val Leu Glu Val Gln Val Ser Arg Xaa Arg Arg Glu
 1 10 15
- Leu Ala Ala Met Lys Xaa Gly Ser Pro Trp Ser Leu Arg Leu Leu Ile 20 25 30
- Cys Cys Ala Ala Met Val Ala Ile Ala Leu Leu Pro Gln Gln Gly Gly 35 40 45
- Gln Ala Ala Cys Phe Val Pro Thr Pro Gly Pro Ala Pro Ala Pro Pro 50 55 60
- Gly Ser Ser Ala Thr Asn Thr Asn Asp Ser Ser Ala Ala Pro Arg Pro 65 70 75 80
- Ala Lys Pro Ser Ala Phe Pro Pro Pro Met Tyr Gly Gly Val Thr Pro
- Gly Ser Leu Gln Pro His Glu Cys Gly Gly Arg Cys Ala Gly Arg Cys 100 105 110
- Ser Ala Thr Ala Tyr Gln Lys Pro Cys Leu Phe Phe Cys Arg Lys Xaa 115 120 125
- Cys Ala Ala Cys Leu Cys Val Pro Pro Gly Thr Tyr Gly Asn Lys Asn 130 135 140
- Thr Cys Pro Cys Tyr Asn Asn Trp Lys Thr Lys Arg Gly Gly Pro Lys 145 150 155 160 Cys Pro
- (2) INFORMATION FOR SEQ ID NO:4051:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 192 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..192
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579361
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4051:
- Tyr Phe Ile Gly Ala Arg Gly Ser Gly Phe Thr Gln Xaa Ala Arg Ala 1 5 10 15
- Gly Ser His Glu Xaa Gly Glu Pro Met Val Ala Ala Ala Ala Asn Leu 20 25 30
- Leu Arg Gly Asn Gly Gly His Arg Ala Ser Pro Pro Thr Arg Arg Pro 35 40 45
- Gly Arg Leu Phe Arg Ala Asp Ala Gly Ser Ser Ser Gly Thr Ala Arg 50 55 60
- Leu Leu Arg Asp Glu His Glu Arg Leu Leu Arg Cys Ser Ser Ala Ser 65 70 75 80
- Gln Ala Gln Arg Ile Pro Thr Pro Asn Val Arg Trp Cys His Pro Arg 85 90 95
- Gln Ser Pro Ala Thr Arg Val Arg Arg Pro Val Arg Gly Ala Val Leu 100 105 110
- Gly Asp Gly Val Pro Glu Ala Val Pro Leu Leu Pro Gln Xaa Leu 115 120 125
- Arg Gly Val Pro Val Arg Ala Ala Gly His Leu Arg Gln Gln Glu His 130 135 140
- Leu Pro Leu Leu Gln Gln Leu Glu Asp Gln Ala Gly Arg Pro Gln Val 145 150 155 160
- Pro Leu Val Ala Leu Pro Leu Gly Leu Leu Asp Glu Ile Phe Cys Ser 165 170 175
- Lys Asn Gln Lys Val Arg Ile Cys Leu Thr Ile Phe Arg Phe His Lys
 180 185 190

- (2) INFORMATION FOR SEQ ID NO:4052: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 168 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..168 (D) OTHER INFORMATION: / Ceres Seq. ID 1579362 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4052: Met Val Ala Ala Ala Asn Leu Leu Arg Gly Asn Gly Gly His Arg 10 Ala Ser Pro Pro Thr Arg Arg Pro Gly Arg Leu Phe Arg Ala Asp Ala 20 25 Gly Ser Ser Ser Gly Thr Ala Arg Leu Leu Arg Asp Glu His Glu Arg 40 Leu Leu Arg Cys Ser Ser Ala Ser Gln Ala Gln Arg Ile Pro Thr Pro 55 60 Asn Val Arg Trp Cys His Pro Arg Gln Ser Pro Ala Thr Arg Val Arg 75 70 Arg Pro Val Arg Gly Ala Val Leu Gly Asp Gly Val Pro Glu Ala Val 90 85 Pro Leu Leu Pro Gln Xaa Leu Arg Gly Val Pro Val Arg Ala Ala 100 105 Gly His Leu Arq Gln Glu His Leu Pro Leu Leu Gln Gln Leu Glu 115 120 Asp Gln Ala Gly Arg Pro Gln Val Pro Leu Val Ala Leu Pro Leu Gly 135 140 Leu Leu Asp Glu Ile Phe Cys Ser Lys Asn Gln Lys Val Arg Ile Cys 150 Leu Thr Ile Phe Arg Phe His Lys 165 (2) INFORMATION FOR SEQ ID NO:4053: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 570 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..570 (D) OTHER INFORMATION: / Ceres Seq. ID 1579366 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4053: qqacqcattt attaagcrcr cctccgccaa ccgcactctg cccgccgaaa gcgtcgtcgg gccacctcgc actcgcgcgc gcctcaaaga tgcacaggca gctcagcctc tccgccagcm cgaagcagca gcagccgcct cctgamggca ccarcaccgg angcggcgac gcggcggcga aggcgatggc ggcggcggag gacgagtcgt cggcctcgca ctccagctcc aaggccagca
- (2) INFORMATION FOR SEQ ID NO: 4054:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 139 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..139
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579367
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4054:

Thr His Leu Leu Ser Xaa Pro Pro Pro Thr Ala Leu Cys Pro Pro Lys
1 5 10 15

Ala Ser Ser Gly His Leu Ala Leu Ala Arg Ala Ser Lys Met His Arg 20 25 30

Gln Leu Ser Leu Ser Ala Ser Xaa Lys Gln Gln Gln Pro Pro Xaa 35 40 45

Gly Thr Xaa Thr Gly Xaa Gly Asp Ala Ala Ala Lys Ala Met Ala Ala 50 55

Ala Glu Asp Glu Ser Ser Ala Ser His Ser Ser Ser Lys Ala Ser Arg 65 70 75 80

Gly Trp Ser Ala Arg Asp Glu Arg Ala Ile His Leu Val Pro Leu Leu 85 90 95

Thr Phe Leu Cys Phe Leu Leu Leu Phe Leu Cys Ser His Asp Pro Ser 100 105 110

Pro Ala Asp Met Ser Ser Phe Ala Gly Gly Gly Gly Gly Gly Gly 115 120 125

Ala Arg Ser Gly Asn Arg Arg Leu Arg Met Leu 130 135

- (2) INFORMATION FOR SEQ ID NO:4055:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 110 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..110
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579368
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4055:

Pro Pro Xaa Gly Thr Xaa Thr Gly Xaa Gly Asp Ala Ala Lys Ala 20 25 30

Met Ala Ala Glu Asp Glu Ser Ser Ala Ser His Ser Ser Ser Lys

Ala Ser Arg Gly Trp Ser Ala Arg Asp Glu Arg Ala Ile His Leu Val 50 55 60

Pro Leu Leu Thr Phe Leu Cys Phe Leu Leu Leu Phe Leu Cys Ser His 70 75 80

Asp Pro Ser Pro Ala Asp Met Ser Ser Phe Ala Gly Gly Gly Gly 85 90 95

Gly Gly Gly Ala Arg Ser Gly Asn Arg Arg Leu Arg Met Leu $100 \hspace{1.5cm} 105 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$

- (2) INFORMATION FOR SEQ ID NO:4056:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 78 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

60

120

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..78
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579369
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4056:

Met Ala Ala Glu Asp Glu Ser Ser Ala Ser His Ser Ser Ser Lys

1 10 15

Ala Ser Arg Gly Trp Ser Ala Arg Asp Glu Arg Ala Ile His Leu Val $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Pro Leu Leu Thr Phe Leu Cys Phe Leu Leu Leu Phe Leu Cys Ser His 35

Asp Pro Ser Pro Ala Asp Met Ser Ser Phe Ala Gly Gly Gly Gly 50 55 60

Gly Gly Ala Arg Ser Gly Asn Arg Arg Leu Arg Met Leu 65 70 75

- (2) INFORMATION FOR SEQ ID NO:4057:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 618 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..618
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579382
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4057: ageaatsccc aacagegeca etgtecagtg egegegtsaa gettgettag stageegeca tggeeteect egegegegte teegtgaage eegtggecat caagggtete geeggeaget etateteegg aaggaagete geegtegeea gGeegtegge eggetegate eggegegees

ctatctccgg aaggaagctc gccgtcgcca gGccgtcggc ccgctccatc cgcaggcccc 180 gcgcagcCgc cgtggtggcc aagtacggcg acaagagcgt ctacttcgac ctcgacgaca 240 teggeaacac caceggacag tgggacetet aeggetetga egegeeeteg ceetacaace 300 cgctacagag caagttette gagacgtteg eggeteegtt caccaagaga ggtetgetge 360 tcaagttcct gctgctgggc ggcggctcac ttctggccta cgtcagcgcg tcggcgtcac 420 cqqacctcct qccqatcaag aaqqqacctc aggaqccqcc qcaqcctqqc ccqcqqqca 480 agatctaagc tcagctactc catttgcatg gtctagtagt agcttgcttt gtactstagc 540 gccggtcgat ccgtcgcaat cgtcatggat catctctcta tcttgttgtt acgctgttca 600

- taatttggta tattcgcc (2) INFORMATION FOR SEQ ID NO:4058:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 92 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..92
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579383
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4058:

Ala Xaa Pro Asn Ser Ala Thr Val Gln Cys Ala Arg Xaa Ala Cys Leu 1 5 10 15

Xaa Ser Arg His Gly Leu Pro Arg Arg Arg Leu Arg Glu Ala Arg Gly
20 25 30

His Gln Gly Ser Arg Arg Gln Leu Tyr Leu Arg Lys Glu Ala Arg Arg 35 40 45

Arg Gln Ala Val Gly Pro Leu His Pro Gln Ala Pro Arg Ser Arg Arg 50 55 60

Gly Gly Gln Val Arg Arg Gln Glu Arg Leu Leu Arg Pro Arg Arg His 65 70 75 80

Arg Gln His His Arg Thr Val Gly Pro Leu Arg Leu

- (2) INFORMATION FOR SEQ ID NO:4059:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 142 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..142
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579384
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4059:

Met Ala Ser Leu Ala Ala Val Ser Val Lys Pro Val Ala Ile Lys Gly
1 5 10 15

Ser Ala Arg Ser Ile Arg Arg Pro Arg Ala Ala Ala Val Val Ala Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Gly Asp Lys Ser Val Tyr Phe Asp Leu Asp Asp Ile Gly Asn Thr 50 55 60

Thr Gly Gln Trp Asp Leu Tyr Gly Ser Asp Ala Pro Ser Pro Tyr Asn 65 70 75 80

Pro Leu Gln Ser Lys Phe Phe Glu Thr Phe Ala Ala Pro Phe Thr Lys
85 90 95

Arg Gly Leu Leu Lys Phe Leu Leu Gly Gly Gly Ser Leu Leu 100 105 110

Ala Tyr Val Ser Ala Ser Ala Ser Pro Asp Leu Leu Pro Ile Lys Lys 115 120 125

- Gly Pro Gln Glu Pro Pro Gln Pro Gly Pro Arg Gly Lys Ile 130 135 140
- (2) INFORMATION FOR SEQ ID NO:4060:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 771 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..771
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579398
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4060:

atcacaattc acagegetca agttetegeg eccagageca aatttttete caetcaatca 60 120 ctgcagccat gnacgccagc ngascggtag caaggcgaag aagggggcgg ctgggcgcaa 180 qqctqqcqqc cccaqqaaqa aqtcqqtqtc qcqqtccqtc aaggccqqqc tqcaqttccc cqtcqqccqq atcqqqcqt acctcaaqaa gggccggtac gcgcagcgCG tgggcaccgg 240 egececegte tatetegeeg eegtgettga gtaeetegee geegaggtge tggagetgge 300 360 cqqcaacqcq qcqaaqqaca acaaqaaqac qcqcatcqtc ccqccacq tqctcctqqc qatccqcaac qacqttqaqc tcqqcaaqct qctqqctggc gtcaccatcg cgcacggcgg 420 480 tqtcctcccc aacatcaacc cqqttctcct qcccaaqaaq qtqqcqqaqa agqcqtctaq cggcggcagc aaggagagca agtcccctaa gaaggccgcc aagtccccaa agaaggcagc 540 600 caaqtccccq aaqaaqqctt aqaaattaqt cactccacta qcqctctqct qtaqcatqtt 660 cgtgtttaga tctgtggatg ttatgtgttc cggcctaatt tcctctttgc cttgtggctt ctgatatgtt catcggcatg tttgccgtgt tgtgtttcct tgttctgatt ttgcaattca 720 tcatcttgtt gaatgaactt actatcggga aatgaagcat aataacgatg c

- (2) INFORMATION FOR SEQ ID NO:4061:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 186 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..186
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579399
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4061:
- Ser Gln Phe Thr Ala Leu Lys Phe Ser Arg Pro Glu Pro Asn Phe Ser 1 5 10 15
- Pro Leu Asn His Cys Ser His Xaa Arg Gln Xaa Xaa Gly Ser Lys Ala 20 25 30
- Lys Lys Gly Ala Ala Gly Arg Lys Ala Gly Gly Pro Arg Lys Lys Ser 35 40 45
- Val Ser Arg Ser Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile 50 55 60
- Gly Arg Tyr Leu Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly 65 70 75 80
- Ala Pro Val Tyr Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val 85 90 95
- Leu Glu Leu Ala Gly Asn Ala Ala Lys Asp Asn Lys Lys Thr Arg Ile
 100 105 110
- Val Pro Arg His Val Leu Leu Ala Ile Arg Asn Asp Val Glu Leu Gly 115 120 125
- Lys Leu Leu Ala Gly Val Thr Ile Ala His Gly Gly Val Leu Pro Asn 130 135 140
- Gly Gly Ser Lys Glu Ser Lys Ser Pro Lys Lys Ala Ala Lys Ser Pro 165 170 175
- Lys Lys Ala Ala Lys Ser Pro Lys Lys Ala 180 185
- (2) INFORMATION FOR SEQ ID NO:4062:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 188 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..188
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579400
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4062:
- His Asn Ser Gln Arg Ser Ser Ser Arg Ala Gln Ser Gln Ile Phe Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$
- His Ser Ile Thr Ala Ala Met Xaa Ala Ser Xaa Xaa Val Ala Arg Arg 20 25 30
- Arg Arg Gly Arg Leu Gly Ala Arg Leu Ala Ala Pro Gly Arg Ser Arg 35 40 45
- Cys Arg Gly Pro Ser Arg Pro Gly Cys Ser Ser Pro Ser Ala Gly Ser 50 60
- Gly Ala Thr Ser Arg Arg Ala Gly Thr Arg Ser Ala Trp Ala Pro Ala 65 70 75 80
- Pro Pro Ser Ile Ser Pro Pro Cys Leu Ser Thr Ser Pro Pro Arg Cys
 85 90 95
- Trp Ser Trp Pro Ala Thr Arg Arg Arg Thr Thr Arg Arg Arg Ala Ser
- Ser Arg Ala Thr Cys Ser Trp Arg Ser Ala Thr Thr Leu Ser Ser Ala 115 120 125
- Ser Cys Trp Leu Ala Ser Pro Ser Arg Thr Ala Val Ser Ser Pro Thr 130 135 140

 Ser Thr Arg Phe Ser Cys Pro Arg Arg Trp Arg Arg Arg Arg Leu Ala

60

120

180 240

300

360

420

540

145 150 155 Ala Ala Arg Arg Ala Ser Pro Leu Arg Arg Pro Pro Ser Pro Gln 165 170 Arg Arg Gln Pro Ser Pro Arg Arg Arg Leu Arg Asn 180 185 (2) INFORMATION FOR SEQ ID NO:4063: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 166 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..166 (D) OTHER INFORMATION: / Ceres Seq. ID 1579401 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4063: Met Xaa Ala Ser Xaa Xaa Val Ala Arg Arg Arg Arg Gly Arg Leu Gly 10 Ala Arg Leu Ala Ala Pro Gly Arg Ser Arg Cys Arg Gly Pro Ser Arg 25 Pro Gly Cys Ser Ser Pro Ser Ala Gly Ser Gly Ala Thr Ser Arg Arg 40 45 Ala Gly Thr Arg Ser Ala Trp Ala Pro Ala Pro Pro Ser Ile Ser Pro 55 Pro Cys Leu Ser Thr Ser Pro Pro Arg Cys Trp Ser Trp Pro Ala Thr 70 75 Arg Arg Arg Thr Thr Arg Arg Ala Ser Ser Arg Ala Thr Cys Ser 90 85 Trp Arg Ser Ala Thr Thr Leu Ser Ser Ala Ser Cys Trp Leu Ala Ser 105 100 110 Pro Ser Arg Thr Ala Val Ser Ser Pro Thr Ser Thr Arg Phe Ser Cys 120 115 125 Pro Arg Arg Trp Arg Arg Arg Leu Ala Ala Ala Ala Arg Arg Ala 135 140 Ser Pro Leu Arg Arg Pro Pro Ser Pro Gln Arg Arg Gln Pro Ser Pro 150 155 Arg Arg Leu Arg Asn 165 (2) INFORMATION FOR SEQ ID NO:4064: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 782 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..782 (D) OTHER INFORMATION: / Ceres Seq. ID 1579402 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4064: asattcagcc cacaagcaca taacaacata gcacccccc tagggtttca caacatatgt accetetege geaaacacte etettteege remgeeteee etecegeeea ettgeteege eggegeggee acegeegeeg cacegeagea gecagteage agategtaac catggeggat tctaaggccg ctgcggcggt gacctccgc acgcgcaagt tcatgaccaa ccgccttctc tecegeaage agttegtget egaGgteate caceeeggee geeceaaegt etecaaggeg qaGbtcaaqq aqaqqctgqc gaagatctac gaggtgaaqg acccaaactg catcttcgtc ttcaagtttc ggaccaactt cggaggcggc aagtccaccg gcttcggtct catctacgac

aaccttgagg ccgccaagaa gttcgagccc aagtaccgcc tcatcaggaa cggccttgct

accaaggtag agaagtcacg aaagcagatg aaggaacgta agracagggc gaagaaaatc cgtggtgtga agaagacaaa agcgggagat gccaagaaga agtaagggag gaagttactt

geettgecat tteteatett aggetttggt ttgtttaggg tgggeteett eeggeaatge 660 tgaatgtgtt tagttagaag tagagaagat tttgecaate acceattacg ttgagtttet 720 egttgeacet tetgtteagt tttgaggeae tttgteagae acaagaatat atatacetgg 780

- (2) INFORMATION FOR SEQ ID NO:4065:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 194 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..194
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579403
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4065:

Xaa Phe Ser Pro Gln Ala His Asn Asn Ile Ala Pro Pro Leu Gly Phe 1 5 10 15

His Asn Ile Cys Thr Leu Ser Arg Lys His Ser Ser Phe Arg Xaa Ala 20 25 30

Ser Pro Pro Ala His Leu Leu Arg Arg Arg Gly His Arg Arg Thr 35 40 45

Ala Ala Ser Gln Gln Ile Val Thr Met Ala Asp Ser Lys Ala Ala 50 55 60

Ala Ala Val Thr Leu Arg Thr Arg Lys Phe Met Thr Asn Arg Leu Leu 65 70 75 80

Ser Arg Lys Gln Phe Val Leu Glu Val Ile His Pro Gly Arg Pro Asn 85 90 95

Val Ser Lys Ala Glu Xaa Lys Glu Arg Leu Ala Lys Ile Tyr Glu Val 100 105 110

Lys Asp Pro Asn Cys Ile Phe Val Phe Lys Phe Arg Thr Asn Phe Gly 115 120 125

Gly Gly Lys Ser Thr Gly Phe Gly Leu Ile Tyr Asp Asn Leu Glu Ala 130 135 140

Thr Lys Val Glu Lys Ser Arg Lys Gln Met Lys Glu Arg Lys Xaa Arg
165 170 175

Ala Lys Lys Ile Arg Gly Val Lys Lys Thr Lys Ala Gly Asp Ala Lys 180 185

Lys Lys

- (2) INFORMATION FOR SEQ ID NO:4066:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 137 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..137
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579404
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4066:

Met Ala Asp Ser Lys Ala Ala Ala Ala Val Thr Leu Arg Thr Arg Lys

1 10 15

Phe Met Thr Asn Arg Leu Leu Ser Arg Lys Gln Phe Val Leu Glu Val
20 25 30

Ile His Pro Gly Arg Pro Asn Val Ser Lys Ala Glu Xaa Lys Glu Arg
35 40 45

Leu Ala Lys Ile Tyr Glu Val Lys Asp Pro Asn Cys Ile Phe Val Phe

55 Lys Phe Arg Thr Asn Phe Gly Gly Gly Lys Ser Thr Gly Phe Gly Leu 70 75 Ile Tyr Asp Asn Leu Glu Ala Ala Lys Lys Phe Glu Pro Lys Tyr Arg 90 Leu Ile Arg Asn Gly Leu Ala Thr Lys Val Glu Lys Ser Arg Lys Gln 100 105 Met Lys Glu Arg Lys Xaa Arg Ala Lys Lys Ile Arg Gly Val Lys Lys 120 Thr Lys Ala Gly Asp Ala Lys Lys 135 130 (2) INFORMATION FOR SEQ ID NO: 4067: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 120 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..120 (D) OTHER INFORMATION: / Ceres Seq. ID 1579405 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4067: Met Thr Asn Arg Leu Leu Ser Arg Lys Gln Phe Val Leu Glu Val Ile 10 His Pro Gly Arg Pro Asn Val Ser Lys Ala Glu Xaa Lys Glu Arg Leu 20 25 Ala Lys Ile Tyr Glu Val Lys Asp Pro Asn Cys Ile Phe Val Phe Lys 4.0 45 Phe Arg Thr Asn Phe Gly Gly Gly Lys Ser Thr Gly Phe Gly Leu Ile 55 Tyr Asp Asn Leu Glu Ala Ala Lys Lys Phe Glu Pro Lys Tyr Arg Leu 70 75 Ile Arg Asn Gly Leu Ala Thr Lys Val Glu Lys Ser Arg Lys Gln Met 90 Lys Glu Arg Lys Xaa Arg Ala Lys Lys Ile Arg Gly Val Lys Lys Thr 100 105 Lys Ala Gly Asp Ala Lys Lys 115 (2) INFORMATION FOR SEQ ID NO:4068: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 650 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -

- (B) LOCATION: 1..650
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579406
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4068:

attcaccgtc	cacgttccat	atggcttcct	gcaggatggc	actcctcctt	ggcttgctgc	60
tgctagtagt	aGcttcgccc	gcgatcgctg	atgacgactc	cggtatctac	taccagctgg	120
ctcttatgtg	gccaggagca	tactgcgagc	agaccagcgc	tgggtgctgc	aaGccgacca	180
ccggcgtctc	gccgrcgcgc	gacttctaca	taacgggctt	caccgtcctt	aacgcgacca	240
ccgacgctgc	agtgacggga	tgcagcaaca	aagttcctta	cgaccctaac	ctgattaccg	300
gcatccaagg	cctgaatcag	tactggagca	acatcaggtg	ccccagcaac	aacgggcaga	360
gcagctggaa	gaacgcctgg	aagaaggccg	gcgcctgatc	ttgctccaga	gggtgtgttt	420
gggaattggg	agggggaaaa	aaagaggaaa	ttgctgcata	gagtcagacg	gtgtatcagc	480
ttgtacgcca	tcaatcaagt	gctgtaaaca	tgcctgggaa	ataattgggg	acctggattt	540
gaataagatt	tgagttgttg	ggggcggacg	tgctacatta	ggccttgttc	ggttattcct	600

aataccttcq qtgcaataaa ggaaatcatc ttgcgcgtga ccgagcgtgc (2) INFORMATION FOR SEQ ID NO:4069: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 131 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..131 (D) OTHER INFORMATION: / Ceres Seq. ID 1579407 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4069: Ser Pro Ser Thr Phe His Met Ala Ser Cys Arg Met Ala Leu Leu Leu 10 Gly Leu Leu Leu Val Val Ala Ser Pro Ala Ile Ala Asp Asp Asp 25 Ser Gly Ile Tyr Tyr Gln Leu Ala Leu Met Trp Pro Gly Ala Tyr Cys 40 Glu Gln Thr Ser Ala Gly Cys Cys Lys Pro Thr Thr Gly Val Ser Pro 55 60 Xaa Arg Asp Phe Tyr Ile Thr Gly Phe Thr Val Leu Asn Ala Thr Thr 70 75 Asp Ala Ala Val Thr Gly Cys Ser Asn Lys Val Pro Tyr Asp Pro Asn 8.5 90 Leu Ile Thr Gly Ile Gln Gly Leu Asn Gln Tyr Trp Ser Asn Ile Arg 100 105 Cys Pro Ser Asn Asn Gly Gln Ser Ser Trp Lys Asn Ala Trp Lys Lys 115 120 Ala Gly Ala 130 (2) INFORMATION FOR SEQ ID NO:4070: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 125 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..125 (D) OTHER INFORMATION: / Ceres Seq. ID 1579408 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4070: Met Ala Ser Cys Arg Met Ala Leu Leu Leu Gly Leu Leu Leu Val 10 Val Ala Ser Pro Ala Ile Ala Asp Asp Ser Gly Ile Tyr Tyr Gln 20 25 Leu Ala Leu Met Trp Pro Gly Ala Tyr Cys Glu Gln Thr Ser Ala Gly 40 Cys Cys Lys Pro Thr Thr Gly Val Ser Pro Xaa Arg Asp Phe Tyr Ile 55 Thr Gly Phe Thr Val Leu Asn Ala Thr Thr Asp Ala Ala Val Thr Gly

115 120 (2) INFORMATION FOR SEQ ID NO:4071:

(i) SEQUENCE CHARACTERISTICS:

85

100

70

Gln Ser Ser Trp Lys Asn Ala Trp Lys Lys Ala Gly Ala

75

90

105

Cys Ser Asn Lys Val Pro Tyr Asp Pro Asn Leu Ile Thr Gly Ile Gln

Gly Leu Asn Gln Tyr Trp Ser Asn Ile Arg Cys Pro Ser Asn Asn Gly

- (A) LENGTH: 120 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..120
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579409
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4071:

Met Ala Leu Leu Leu Gly Leu Leu Leu Leu Val Val Ala Ser Pro Ala 1 5 10 15

Ile Ala Asp Asp Ser Gly Ile Tyr Tyr Gln Leu Ala Leu Met Trp
20 25 30

Pro Gly Ala Tyr Cys Glu Gln Thr Ser Ala Gly Cys Cys Lys Pro Thr
35 40 45

Thr Gly Val Ser Pro Xaa Arg Asp Phe Tyr Ile Thr Gly Phe Thr Val
50
55
60
Leu Asp Ala Thr Thr Asp Ala Ala Val Thr Cly Cya Ser Asp Lyr Val

Leu Asn Ala Thr Thr Asp Ala Ala Val Thr Gly Cys Ser Asn Lys Val 65 70 75 80

Pro Tyr Asp Pro Asn Leu Ile Thr Gly Ile Gln Gly Leu Asn Gln Tyr 85 90 95

Trp Ser Asn Ile Arg Cys Pro Ser Asn Asn Gly Gln Ser Ser Trp Lys
100 105 110

Asn Ala Trp Lys Lys Ala Gly Ala 115 120

- (2) INFORMATION FOR SEQ ID NO:4072:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 635 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..635
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579440
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4072:

atttatattt atttattgct gccgcgtcca ccgtccgtcc ccaaacccta ccgcagtcgc 60 egecacegte teccetectg atecaateca atggegegee tecacetegt ggeegtggea 120 atgggettge tettggeett gacgacggeg caggeaccgg gegegtecae gatgeceqCq 180 cccatggcgC agntccggcg acctcggcgc ctcctcgtcc cgcgccatcc ccgacccaga 240 agacegetee ageteeggeg eccaatgeea eggtaceege eccegeeteG eegeeggege 300 egagetetat egggeagaeg eegaeegagg egeegteete eesteegeeg eecagegeeg 360 egtecagegt tgeeteegee ttgtaegtgg Neegeegeta tggegGetgt egtgttttte 420 480 tggatttgac acgatggctc ccCgctaccg ctggtcgagt ttgcttatta ggatactagt 540 agttaattaa tagttgggtt gatcagatca gatctagcgt ttttgttgag tggggatatt 600 atttcttcta cggatctgca cactagggtt atgtc

- (2) INFORMATION FOR SEQ ID NO:4073:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 178 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..178
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579441
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4073:

Leu Tyr Leu Phe Ile Ala Ala Ala Ser Thr Val Arg Pro Gln Thr Leu 10 Pro Gln Ser Pro Pro Pro Ser Pro Leu Leu Ile Gln Ser Asn Gly Ala 25 Pro Pro Pro Arg Gly Arg Gly Asn Gly Leu Ala Leu Gly Leu Asp Asp 4.0 Gly Ala Gly Thr Gly Arg Val His Asp Ala Arg Ala His Gly Ala Xaa 55 60 Pro Ala Thr Ser Ala Pro Pro Arg Pro Ala Pro Ser Pro Thr Gln Lys 70 75 Thr Ala Pro Ala Pro Ala Pro Asn Ala Thr Val Pro Ala Pro Ala Ser 85 90 Pro Pro Ala Pro Ser Ser Ile Gly Gln Thr Pro Thr Glu Ala Pro Ser 100 105 Ser Pro Pro Pro Ser Ala Ala Ser Ser Val Ala Ser Ala Leu Tyr 120 125 Val Xaa Arg Arg Tyr Gly Gly Cys Arg Val Phe Leu Leu Arg Ser Val 135 140 Leu Gly Ala Asp Gly Ser Ala Ala Tyr Gly Met Val Arg Cys Gly Val 150 155 Asp Leu Thr Arg Trp Leu Pro Ala Thr Ala Gly Arg Val Cys Leu Leu 165 170 Gly Tyr

- (2) INFORMATION FOR SEQ ID NO:4074:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 111 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..111
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579442
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4074:

Met Ala Arg Leu His Leu Val Ala Val Ala Met Gly Leu Leu Leu Ala 1 5 10 15

Leu Thr Thr Ala Gln Ala Pro Gly Ala Ser Thr Met Pro Ala Pro Met 20 25 30

Ala Gln Xaa Arg Arg Pro Arg Arg Leu Leu Val Pro Arg His Pro Arg 35 40 45

Pro Arg Arg Pro Leu Gln Leu Arg Arg Pro Met Pro Arg Tyr Pro Pro 50 55 60

Pro Pro Arg Arg Arg Arg Ala Leu Ser Gly Arg Arg Arg Pro Arg 65 70 75 80

Arg Arg Pro Pro Leu Arg Arg Pro Ala Pro Arg Pro Ala Leu Pro Pro 85 90 95

Pro Cys Thr Trp Xaa Ala Ala Met Ala Ala Val Val Phe Phe 100 \$105\$

- (2) INFORMATION FOR SEQ ID NO:4075:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 101 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..101
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579443

780

- Arg Pro Ala Leu Pro Pro Pro Cys Thr Trp Xaa Ala Ala Met Ala Ala 85 90 95
- Val Val Phe Phe Phe 100
- (2) INFORMATION FOR SEQ ID NO:4076:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 780 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..780
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579447
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4076: acteageeca etacetttea gattttteet eatetgeege egeetgeaec caacaageet 60 ctcgacgcta gtcatggccg cttccaacgg cgccgcscgg tcgacgagac cgtcgccgcc 120 accgactecg tgcaggagec tecceagaag atetecaaga tetetecet geteaaggtg 180 aagaagetet eegagaagge egtgetgeeg teeegegget eegetetege egeeggetae 240 gacctetega gegeegagga gatggtggtg eeggegegtg geaaggeget egtgeegaee 300 $\verb|gacctcagcg| | tcgccatccc| | gcacggaacc| | tacgcgCgca| | tcgcGCccag| | gtcggggctg|$ 360 gcgctgaagc actccatcga cgtgggcgcc ggcgtgatcg acgcggacta ccgaggcccc 420 gtcggcgtca tcctcttcaa ccactccgac gccgacttcg ccgtgaagcc cggcgacagg 480 atcgcgcaga tgatcatcga ggtgatcgcg acgcccgagg tcgcggaggt ggaggacctc 540 gacgccaccg tccgtgggga cggagggttc gggtccaccg gcgtctgaag ggattcggtg 600 tctaggttag gatggcgatg caagccttgg tgtcttttgt tggctctaag aaatcgtgat 660 gttcaccatc actatcctgc tatcgataat tagtattgag attagtacgt aggttgcgta 720
- (2) INFORMATION FOR SEQ ID NO:4077:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 195 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..195
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579448

qttaqctcqa tqcacqtact attqtcqaga actcqctatt ctqtqatqtt gaaaatqtct

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4077:
- Thr Gln Pro Thr Thr Phe Gln Ile Phe Pro His Leu Pro Pro Pro Ala 1 5 10 15
 Pro Asn Lys Pro Leu Asp Ala Ser His Gly Arg Phe Gln Arg Arg Arg
- 20 25 30 Xaa Val Asp Glu Thr Val Ala Ala Thr Asp Ser Val Gln Glu Pro Pro
- 35 40 45
 Gln Lys Ile Ser Lys Ile Ser Pro Leu Leu Lys Val Lys Lys Leu Ser
 50 55 60

60

120

180

240

```
Glu Lys Ala Val Leu Pro Ser Arg Gly Ser Ala Leu Ala Ala Gly Tyr
Asp Leu Ser Ser Ala Glu Glu Met Val Val Pro Ala Arg Gly Lys Ala
                                    90
Leu Val Pro Thr Asp Leu Ser Val Ala Ile Pro His Gly Thr Tyr Ala
                                105
                                                     110
Arg Ile Ala Pro Arg Ser Gly Leu Ala Leu Lys His Ser Ile Asp Val
                            120
                                                 125
Gly Ala Gly Val Ile Asp Ala Asp Tyr Arg Gly Pro Val Gly Val Ile
                        135
                                             140
Leu Phe Asn His Ser Asp Ala Asp Phe Ala Val Lys Pro Gly Asp Arg
                    150
                                        155
Ile Ala Gln Met Ile Ile Glu Val Ile Ala Thr Pro Glu Val Ala Glu
                165
                                   170
Val Glu Asp Leu Asp Ala Thr Val Arg Gly Asp Gly Gly Phe Gly Ser
            180
                                185
Thr Gly Val
        195
(2) INFORMATION FOR SEQ ID NO:4078:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 108 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..108
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579449
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4078:
Met Val Val Pro Ala Arg Gly Lys Ala Leu Val Pro Thr Asp Leu Ser
                                    10
Val Ala Ile Pro His Gly Thr Tyr Ala Arg Ile Ala Pro Arg Ser Gly
                                25
Leu Ala Leu Lys His Ser Ile Asp Val Gly Ala Gly Val Ile Asp Ala
                            40
                                                 45
Asp Tyr Arg Gly Pro Val Gly Val Ile Leu Phe Asn His Ser Asp Ala
                                            60
Asp Phe Ala Val Lys Pro Gly Asp Arg Ile Ala Gln Met Ile Ile Glu
                    70
                                        75
Val Ile Ala Thr Pro Glu Val Ala Glu Val Glu Asp Leu Asp Ala Thr
                85
                                    90
Val Arg Gly Asp Gly Gly Phe Gly Ser Thr Gly Val
            100
                                105
(2) INFORMATION FOR SEQ ID NO:4079:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 469 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..469
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579454
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4079:
atccqttqct catctcacca gaagcgaaGc cggaggaggg aggaaggaga tcgcgagcag
ccggagccgg aggcCgagag gatgaagacg ttcgacccgt ggccggtctt cttccgccgg
```

gagtggaagc gcaactggcc cttcctcacg gggttcgcca tcaccggctt catcatcacc

aagatgacgg ccaacttcac cgaggaggac ctcaagaact ccaagttcgt ccaggaacac

aagaagcgct gaccaaccgg gagtcgtccg aatcgcctgc ggatgaaaaa ttagcccct

atttatcttg tcttttttt tatctagatg cgtgcactct attgtaataa tgtaataaga 360 ggcaattgga ttgatccaac agcaaccggc ttctgatttt gaTcygcttc gctgacataa 420 tatgtgcctt ttttctggat gttggattgc atctaatcct gttgaattg

- (2) INFORMATION FOR SEQ ID NO:4080:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 83 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..83
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579455
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4080:

Ile Arg Cys Ser Ser His Gln Lys Arg Ser Arg Arg Arg Glu Glu Gly
1 5 10 15

Asp Arg Glu Gln Pro Glu Pro Glu Ala Glu Arg Met Lys Thr Phe Asp 20 25 30

Pro Trp Pro Val Phe Phe Arg Arg Glu Trp Lys Arg Asn Trp Pro Phe 35 40 45

Leu Thr Gly Phe Ala Ile Thr Gly Phe Ile Ile Thr Lys Met Thr Ala 50 55 60

Asn Phe Thr Glu Glu Asp Leu Lys Asn Ser Lys Phe Val Gln Glu His 65 70 75 80

Lys Lys Arg

- (2) INFORMATION FOR SEQ ID NO:4081:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 114 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..114
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579456
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4081:

Pro Leu Leu Ile Ser Pro Glu Ala Lys Pro Glu Glu Gly Gly Arg Arg 1 5 10 15

Ser Arg Ala Ala Gly Ala Gly Gly Arg Glu Asp Glu Asp Val Arg Pro $20 \\ 25 \\ 30$

Val Ala Gly Leu Leu Pro Pro Gly Val Glu Ala Gln Leu Ala Leu Pro 35 40 45

His Gly Val Arg His His Arg Leu His His His Gln Asp Asp Gly Gln 50 55 60

Leu His Arg Gly Gly Pro Gln Glu Leu Gln Val Arg Pro Gly Thr Gln 65 70 75 80

Glu Ala Leu Thr Asn Arg Glu Ser Ser Glu Ser Pro Ala Asp Glu Lys
85 90 95

Leu Ala Pro Tyr Leu Ser Cys Leu Phe Phe Tyr Leu Asp Ala Cys Thr 100 105 110

Leu Leu

- (2) INFORMATION FOR SEQ ID NO:4082:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 741 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..741
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579457
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4082:

cettettece ceaetgtege egeteetegt ettecaetet etceaetttg etgettette 60 tecettatta atgetegtgg geteetatga teegeeetee geegegggtt tettgateea 120 tecceggece aaggaagegg acceeggega acaeteetga cagattegee eCgteegeeg 180 ctccctcgat tcggtccCTt ccccgtcagc ggcaggtgtt taggGacctc tgcagcatag 240 catctggtcc gtccctggag atgtccggcg tacaggagca gttcgagatc aagttccggG 300 ctgccggacg gcaccgacat cggaccNcag gcggttcccg ccgrcgtcca ccgtcgccac 360 gctcaaggag accatcatcg cccagtggcc cgatgatggt gaaggctctg cagcgcaagc 420 cqqcqatqta tactqqcqqc qqcqqcqqcq qcqaqcaaaq cqqqaqqaqc aqctqqtqaq 480 qaqattqaqa ctqtqqtqqt qcqtqqcqtq tactqttcat cqttcaqaca qatqacttqc 540 tggccCatgc tgtgggctca ggaactgctt cttcacagtg gcgatgttct gatctgtaat 600 660 qcacqaagca cgatactatt tgttgtatat gtatgtatgt gtaactacag ataagattag gaacggtgtg aaagaataaa gaaaccgatg gaataagtga tttgggaaca atctcagaat 720 caatttatgc agtcctttag g

- (2) INFORMATION FOR SEQ ID NO:4083:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 52 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..52
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579458
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4083:

Leu Leu Pro Pro Leu Ser Pro Leu Leu Val Phe His Ser Leu His Phe 10

Ala Ala Ser Ser Pro Leu Leu Met Leu Val Gly Ser Tyr Asp Pro Pro 20 25

Ser Ala Ala Gly Phe Leu Ile His Pro Arg Pro Lys Glu Ala Asp Pro 35

Gly Glu His Ser

50

- (2) INFORMATION FOR SEO ID NO:4084:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 72 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..72
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579459
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4084:

Met Ser Gly Val Gln Glu Gln Phe Glu Ile Lys Phe Arg Ala Ala Gly 10 5

Arg His Arg His Arg Thr Xaa Gly Gly Ser Arg Xaa Arg Pro Pro Ser 25 30 2.0

Pro Arg Ser Arg Pro Ser Ser Pro Ser Gly Pro Met Met Val Lys 4.0

Ala Leu Gln Arg Lys Pro Ala Met Tyr Thr Gly Gly Gly Gly Gly 55

Glu Gln Ser Gly Arg Ser Ser Trp 70

(2) INFORMATION FOR SEQ ID NO:4085: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 40 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..40 (D) OTHER INFORMATION: / Ceres Seq. ID 1579460 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4085: Met Thr Cys Trp Pro Met Leu Trp Ala Gln Glu Leu Leu His Ser 10 Gly Asp Val Leu Ile Cys Asn Ala Arg Ser Thr Ile Leu Phe Val Val 20 25 Tyr Val Cys Met Cys Asn Tyr Arg 35 (2) INFORMATION FOR SEQ ID NO:4086: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 629 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..629 (D) OTHER INFORMATION: / Ceres Seq. ID 1579468 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4086: aaaaagaggt gtccatggtg ctcaagctca gccaagcaaa taagacgact tgtttcattg 60 attettgaag agategaget tettttgeac cacaaggteg aggatgtett geaactgegg 120 atcaagctgc ggctgcggct caagctgcaa gtgcggcaag aagtaccctg acctggagga 180 240 qacqaqcacc qccqcqcagg ccaccgtcgt cctcggcgtg gccccggaga agaaggccgc 300 qcccqaqttc qtcqaqqccg cggcggagtc cggcgaggcc gcccAcgAcc tgcggctgcg 360 qtaqcaGctq caaqtqcqac ccctqcaact gctgatcaca tcgatcgacg accatggata 420 tgattattat ctatctagct tgtggtggtg gttgaacaat aataagcgag gccgagctgg 480 ctgccataca taggtattgt gtggtgtgtg agaagagaga agaaacagag ttcttcagtt tgctatctct ctctctgcat gtttggcgtc agtctttgtg ctcatgtacg tgtgtctaca 540 tgcatgttgg ttgatccgat tgcgtctgct gtaaccatat attaattggt ccacgatgat 600 atgatttgat actatatata tatatatat (2) INFORMATION FOR SEQ ID NO:4087: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 56 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..56 (D) OTHER INFORMATION: / Ceres Seq. ID 1579469 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4087: Lys Lys Arg Cys Pro Trp Cys Ser Ser Ser Ala Lys Gln Ile Arg Arg 10 Leu Val Ser Leu Ile Leu Glu Glu Ile Glu Leu Leu His His Lys 25 2.0 Val Glu Asp Val Leu Gln Leu Arg Ile Lys Leu Arg Leu Arg Leu Lys 40 Leu Gln Val Arg Gln Glu Val Pro 50 55

- (2) INFORMATION FOR SEQ ID NO:4088:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 66 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..66
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579470
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4088:

Met Ser Cys Asn Cys Gly Ser Ser Cys Gly Cys Gly Ser Ser Cys Lys 1 5 10 15

Cys Gly Lys Lys Tyr Pro Asp Leu Glu Glu Thr Ser Thr Ala Ala Gln 20 25 30

Ala Thr Val Val Leu Gly Val Ala Pro Glu Lys Lys Ala Ala Pro Glu 35 40 45

Phe Val Glu Ala Ala Ala Glu Ser Gly Glu Ala Ala His Asp Leu Arg 50 55 60

Leu Arg

65

- (2) INFORMATION FOR SEQ ID NO:4089:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 676 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..676
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579471
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4089: actectecaa accetagece agageageeg categaacte tacetgeett tetetegtee 60 ctggcggcgg cggcaggatg gcggcttcta ctgcgaggac ggtgaaggat gtgaaccccc 120 180 acgagtttgt caaggeetae teegeecate teaaaegete eggeaagatg gagetteetg 240 agtgggttga cattgtgaag actgcgaggt tcaaggagct ccctccttat gaccctgact 300 ggtactacat cagggctgca tctgtagcaa ggaagatcta cttgagacaa ggcattggtg ttggtggctt ccagaagatt tatggtggcc gccagaggaa tgGctcacgc ccacctcact 360 420 tetgeaagag cagtggtgee attteacgea acatecteca geagetgeag gagatgggea tcattgatgt cgatcccaag ggtggacggc gcatcacctc ccagggaagg cgtgatctgg 480 accaggtggc tggaagggtt gctgttgaag cttgagcaat ctcatatttg gtttctatga 540 tgtcatgttt gattgttgag atggctacac tttatttgca ctttggatta ggatttttgt 600 gttaagagaa ctcaaggcat tctagctatg gttcacactg tattttccct gagtacctat 660 ttatcaaaac ctattc
- (2) INFORMATION FOR SEQ ID NO:4090:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 145 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..145
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579472
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4090:

Met Ala Ala Ser Thr Ala Arg Thr Val Lys Asp Val Asn Pro His Glu $1 \ 5 \ 10 \ 15$ Phe Val Lys Ala Tyr Ser Ala His Leu Lys Arg Ser Gly Lys Met Glu

```
Client Docket No. 80145.003
                                25
            20
Leu Pro Glu Trp Val Asp Ile Val Lys Thr Ala Arg Phe Lys Glu Leu
                            40
Pro Pro Tyr Asp Pro Asp Trp Tyr Tyr Ile Arg Ala Ala Ser Val Ala
Arg Lys Ile Tyr Leu Arg Gln Gly Ile Gly Val Gly Gly Phe Gln Lys
                                        75
Ile Tyr Gly Gly Arg Gln Arg Asn Gly Ser Arg Pro Pro His Phe Cys
                                    90
Lys Ser Ser Gly Ala Ile Ser Arg Asn Ile Leu Gln Gln Leu Gln Glu
           100
                               105
Met Gly Ile Ile Asp Val Asp Pro Lys Gly Gly Arg Arg Ile Thr Ser
                           120
                                                125
Gln Gly Arg Arg Asp Leu Asp Gln Val Ala Gly Arg Val Ala Val Glu
                       135
                                            140
Ala
145
(2) INFORMATION FOR SEQ ID NO:4091:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 115 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
   (ii) MOLECULE TYPE: peptide
   (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..115
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579473
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4091:
Met Glu Leu Pro Glu Trp Val Asp Ile Val Lys Thr Ala Arg Phe Lys
                                    10
             5
Glu Leu Pro Pro Tyr Asp Pro Asp Trp Tyr Tyr Ile Arg Ala Ala Ser
                                2.5
           20
Val Ala Arg Lys Ile Tyr Leu Arg Gln Gly Ile Gly Val Gly Gly Phe
                            40
Gln Lys Ile Tyr Gly Gly Arg Gln Arg Asn Gly Ser Arg Pro Pro His
                        55
Phe Cys Lys Ser Ser Gly Ala Ile Ser Arg Asn Ile Leu Gln Gln Leu
                    70
                                        75
Gln Glu Met Gly Ile Ile Asp Val Asp Pro Lys Gly Gly Arg Arg Ile
                                    90
                8.5
Thr Ser Gln Gly Arg Arg Asp Leu Asp Gln Val Ala Gly Arg Val Ala
            100
                                105
Val Glu Ala
        115
(2) INFORMATION FOR SEQ ID NO:4092:
     (i) SEQUENCE CHARACTERISTICS:
```

- (A) LENGTH: 72 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..72
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579474
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4092:

Met Val Ala Arg Gly Met Ala His Ala His Leu Thr Ser Ala Arg 10 5

Ala Val Val Pro Phe His Ala Thr Ser Ser Ser Ser Cys Arg Arg Trp 20 25

Ala Ser Leu Met Ser Ile Pro Arg Val Asp Gly Ala Ser Pro Pro Arg 40 Glu Gly Val Ile Trp Thr Arg Trp Leu Glu Gly Leu Leu Leu Lys Leu 55 60 Glu Gln Ser His Ile Trp Phe Leu 70 (2) INFORMATION FOR SEQ ID NO:4093: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 321 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..321 (D) OTHER INFORMATION: / Ceres Seq. ID 1579490 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4093: aaataqqaca cqccqqctaq tactgcgcca gccCactcca gcgctgaagg cctgcagcgc caqcqcaqcq cytctctqct actqtqnctg ctgacgccgg tggggtgtga gccaactgcg 120 agctgctgcc accectgctg ccqcqktcqa ccqccqgccc cggaccgaga tggacgctcg 180 qtqqqqqtq ctqctcqcqc tgctqgtcqc cagcqgcqgc gtccgtqtct gcgccqccqc 240 tqkqqccaaq qqcqccaact ggctgggcgg gctgagccgc gcgtcgttcc ccaaggggtt 300 cqtqttcggg acggcgacgt c (2) INFORMATION FOR SEQ ID NO:4094: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 30 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..30 (D) OTHER INFORMATION: / Ceres Seq. ID 1579491 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4094: Asn Arg Thr Arg Arg Leu Val Leu Arg Gln Pro Thr Pro Ala Leu Lys 10 5 Ala Cys Ser Ala Ser Ala Ala Xaa Leu Cys Tyr Cys Xaa Cys 20 (2) INFORMATION FOR SEQ ID NO:4095: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 50 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..50 (D) OTHER INFORMATION: / Ceres Seq. ID 1579492 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4095: Met Asp Ala Arg Trp Ala Val Leu Leu Ala Leu Leu Val Ala Ser Gly 10

Gly Gly Leu Ser Arg Ala Ser Phe Pro Lys Gly Phe Val Phe Gly Thr 35 40 45 Ala Thr

Gly Val Arg Val Cys Ala Ala Ala Xaa Ala Lys Gly Ala Asn Trp Leu

Ala Thr 50

(2) INFORMATION FOR SEQ ID NO:4096:

- Page 2403 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 344 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..344 (D) OTHER INFORMATION: / Ceres Seq. ID 1579493 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4096: gageceatec atetecattt eegeegeeee geegeegaga gaeceeaace ceaeceatee accaccatgt ggegeegect ceaeacceta geeeegect tgegeaggGe taeegeegee gacagagaga accetagaga atacagata tetagagaa agacagaaca gatataataa 180 gcggccgccg ctttccgccg caccagcccg ctctaccttt ggattaggtg ttggtacccc 240 tgttgttccc tttgtttgct cccgctatga aacgagacga gagaagaatg agcaaggttt 300 ttgttcgcag ctatttttgt ccaatgatat tgatatgttg ttct (2) INFORMATION FOR SEQ ID NO:4097: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 89 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..89 (D) OTHER INFORMATION: / Ceres Seq. ID 1579494 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4097: Glu Pro Ile His Leu His Phe Arg Arg Pro Ala Ala Glu Arg Pro Gln 10 Pro His Pro Ser Thr Thr Met Trp Arg Arg Leu His Thr Leu Ala Pro 2.0 25 Ala Leu Arg Arg Ala Thr Ala Ala Ala Gly Ala Pro Ala Ala Ser 4.0 Ala Ser Ser Ala Ala Arg Ala Ala Pro Leu Ser Ser Ala Ala Ala Ala 55 60 Phe Arg Arg Thr Ser Pro Leu Tyr Leu Trp Ile Arg Cys Trp Tyr Pro 70 75 Cys Cys Ser Leu Cys Leu Leu Pro Leu 85 (2) INFORMATION FOR SEQ ID NO: 4098: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 74 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..74 (D) OTHER INFORMATION: / Ceres Seq. ID 1579495 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4098: Ala His Pro Ser Pro Phe Pro Pro Pro Arg Arg Glu Thr Pro Thr 10 5
- Pro Pro Ile His His His Val Ala Pro Pro Pro His Pro Ser Pro Arg
- 25 20
- Leu Ala Gln Gly Tyr Arg Arg Arg Arg Gly Pro Cys Gly Val Arg 4.0 45
- Leu Leu Cys Ser Pro Arg Arg Pro Ala Leu Leu Gly Gly Arg Arg Phe 50 55 60

```
Pro Pro His Gln Pro Ala Leu Pro Leu Asp
                    70
(2) INFORMATION FOR SEO ID NO:4099:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 67 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..67
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579496
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4099:
Met Trp Arg Arg Leu His Thr Leu Ala Pro Ala Leu Arg Arg Ala Thr
                                    10
Ala Ala Ala Gly Ala Pro Ala Ala Ser Ala Ser Ser Ala Ala Arg
            20
                                25
Ala Ala Pro Leu Ser Ser Ala Ala Ala Ala Phe Arg Arg Thr Ser Pro
                            40
                                                45
Leu Tyr Leu Trp Ile Arg Cys Trp Tyr Pro Cys Cys Ser Leu Cys Leu
    50
Leu Pro Leu
(2) INFORMATION FOR SEQ ID NO:4100:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 737 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..737
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579503
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4100:
atagaaagtt gaaaggatga agttagagga totogttoca otgogotacg agacggoago
                                                                        60
gctgcggaac aacaatggcg atgatgcctc ctgcagcggc gtcatccctc gcctccactc
                                                                       120
cccgcggcat cgccgctccg cctactcgca cggcatccct gtgcatccgc ttaggtgtcg
                                                                       180
tgacggcgac gctgttcgct ggactggcgg cggcgtcgca gccagtggag cgtcacgccg
                                                                       240
cggtggtggt cgcgatggcg aagagggagc aggagctgga ggggatccag gccatgacga
                                                                       300
cggaacagct ggaggaggag gtggtagacc tcaaggggga gcttttcctG ctccgcctta
aGcgctcggc gcgccaggag ttcaagaaca gcgagttcgg ccgcatgcgc aagaggattg
                                                                       420
ctcgtatgtt gactgtgaaa agagagcggg aaactgaaca aggaataaac aagagattgt
                                                                       480
ccagggagct tgataggaaa tggaagcagg gcattgtggt cagaccacca ccatctctaa
                                                                       540
gggagaacaa agaggagtag agagctgcaa aagaagcaat ctgcaaaaagt cgtttcatgc
                                                                       600
aagagtgttg caagaaggtt cctttgtgat tccaaacttt atttcattgt tacgtattcc
                                                                       660
                                                                       720
atgtttacat tttactaagc attgctatcc gaatctgaat ttcagtcgtt agtctcttct
gtaaatttga tttatct
(2) INFORMATION FOR SEQ ID NO:4101:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 161 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
```

(A) NAME/KEY: peptide(B) LOCATION: 1..161

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4101:

(D) OTHER INFORMATION: / Ceres Seq. ID 1579504

Met Ala Met Met Pro Pro Ala Ala Ser Ser Leu Ala Ser Thr Pro Arg Gly Ile Ala Ala Pro Pro Thr Arg Thr Ala Ser Leu Cys Ile Arg 25 Leu Gly Val Val Thr Ala Thr Leu Phe Ala Gly Leu Ala Ala Ala Ser 40 Gln Pro Val Glu Arg His Ala Ala Val Val Ala Met Ala Lys Arg 55 Glu Gln Glu Leu Glu Gly Ile Gln Ala Met Thr Thr Glu Gln Leu Glu 70 7.5 Glu Glu Val Val Asp Leu Lys Gly Glu Leu Phe Leu Leu Arg Leu Lys 85 90 Arg Ser Ala Arg Gln Glu Phe Lys Asn Ser Glu Phe Gly Arg Met Arg 100 105 Lys Arg Ile Ala Arg Met Leu Thr Val Lys Arg Glu Arg Glu Thr Glu 120 Gln Gly Ile Asn Lys Arg Leu Ser Arg Glu Leu Asp Arg Lys Trp Lys 135 140 Gln Gly Ile Val Val Arg Pro Pro Pro Ser Leu Arg Glu Asn Lys Glu 150 155 Glu

- (2) INFORMATION FOR SEQ ID NO:4102:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 159 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..159
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579505
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4102:
- Met Met Pro Pro Ala Ala Ala Ser Ser Leu Ala Ser Thr Pro Arg Gly
 1 5 10 15
- Ile Ala Ala Pro Pro Thr Arg Thr Ala Ser Leu Cys Ile Arg Leu Gly
 20 25 30
- Val Val Thr Ala Thr Leu Phe Ala Gly Leu Ala Ala Ala Ser Gln Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Val Glu Arg His Ala Ala Val Val Ala Met Ala Lys Arg Glu Gln 50 55 60
- Glu Leu Glu Gly Ile Gln Ala Met Thr Thr Glu Gln Leu Glu Glu Glu 65 70 75 80
- Val Val Asp Leu Lys Gly Glu Leu Phe Leu Leu Arg Leu Lys Arg Ser 85 90 95 Ala Arg Gln Glu Phe Lys Asn Ser Glu Phe Gly Arg Met Arg Lys Arg
- 100 105 110

 Ile Ala Arg Met Leu Thr Val Lys Arg Glu Arg Glu Thr Glu Gln Gly
- 115 120 125

 Ile Asn Lys Arg Leu Ser Arg Glu Leu Asp Arg Lys Trp Lys Gln Gly
- (2) INFORMATION FOR SEQ ID NO:4103:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 158 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..158
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579506
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4103:
- Met Pro Pro Ala Ala Ala Ser Ser Leu Ala Ser Thr Pro Arg Gly Ile

 5 10 15
- Ala Ala Pro Pro Thr Arg Thr Ala Ser Leu Cys Ile Arg Leu Gly Val 20 25 30
- Val Thr Ala Thr Leu Phe Ala Gly Leu Ala Ala Ala Ser Gln Pro Val 35 40 45
- Glu Arg His Ala Ala Val Val Val Ala Met Ala Lys Arg Glu Gln Glu 50 55 60
- Leu Glu Gly Ile Gln Ala Met Thr Thr Glu Gln Leu Glu Glu Glu Val 65 70 75 80
- Val Asp Leu Lys Gly Glu Leu Phe Leu Leu Arg Leu Lys Arg Ser Ala 85 90 95
- Arg Gln Glu Phe Lys Asn Ser Glu Phe Gly Arg Met Arg Lys Arg Ile
 100 105 110
- Ala Arg Met Leu Thr Val Lys Arg Glu Arg Glu Thr Glu Gln Gly Ile 115 120 125
- Asn Lys Arg Leu Ser Arg Glu Leu Asp Arg Lys Trp Lys Gln Gly Ile 130 135
- Val Val Arg Pro Pro Pro Ser Leu Arg Glu Asn Lys Glu Glu 145 150 155
- (2) INFORMATION FOR SEQ ID NO:4104:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 456 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..456
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579543
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4104:
- agecgteate gtttegegte tgeeteagee egecgeaagg agaggagaca tettegagaa 60 getgaaatgg eteetaaage tgeteetgee aagaagggtg atgeeaagae eeaggeettg 120 aaggttgeea aggetgtgaa gtetggggea geeaagaaga agaccaagaa gateegeaeg 180 tetgtgacat tteacegeee eacgaeeetg aagaaggeta gggaeeeeaa gtacceaega 240 ateageaeta eeggaaggaa eaagettgat eagtaceaaa tteteaagta eeeeettaee 300 acagaateag egatgaagaa gattgaagat aacaacaete tggtetteat tgttgaeete 360 aaggeagaca agaagaagat eaaggetgee gteaagaaga tgtatgaeat eeaggeaaag 420 aaggteaaca eettgateag geetgatggg aagaag
- (2) INFORMATION FOR SEQ ID NO:4105:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 152 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..152
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579544
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4105:
- Ser Arg His Arg Phe Ala Ser Ala Ser Ala Arg Arg Lys Glu Arg Arg

 1 5 10 15
- His Leu Arg Glu Ala Glu Met Ala Pro Lys Ala Ala Pro Ala Lys Lys 20 25 30

60

120

```
Gly Asp Ala Lys Thr Gln Ala Leu Lys Val Ala Lys Ala Val Lys Ser
Gly Ala Ala Lys Lys Lys Thr Lys Lys Ile Arg Thr Ser Val Thr Phe
                       5.5
                                           60
His Arg Pro Thr Thr Leu Lys Lys Ala Arg Asp Pro Lys Tyr Pro Arg
                    70
Ile Ser Thr Thr Gly Arg Asn Lys Leu Asp Gln Tyr Gln Ile Leu Lys
               85
                                   90
Tyr Pro Leu Thr Thr Glu Ser Ala Met Lys Lys Ile Glu Asp Asn Asn
           100
                               105
Thr Leu Val Phe Ile Val Asp Leu Lys Ala Asp Lys Lys Ile Lys
                           120
       115
                                               125
Ala Ala Val Lys Lys Met Tyr Asp Ile Gln Ala Lys Lys Val Asn Thr
                      135
                                           140
Leu Ile Arg Pro Asp Gly Lys Lys
                   150
(2) INFORMATION FOR SEQ ID NO:4106:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 130 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..130
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579545
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4106:
Met Ala Pro Lys Ala Ala Pro Ala Lys Lys Gly Asp Ala Lys Thr Gln
                                   10
               5
Ala Leu Lys Val Ala Lys Ala Val Lys Ser Gly Ala Ala Lys Lys
           20
                               25
                                                    30
Thr Lys Lys Ile Arg Thr Ser Val Thr Phe His Arg Pro Thr Thr Leu
                            40
Lys Lys Ala Arg Asp Pro Lys Tyr Pro Arg Ile Ser Thr Thr Gly Arg
                       55
Asn Lys Leu Asp Gln Tyr Gln Ile Leu Lys Tyr Pro Leu Thr Thr Glu
                                       75
                    70
Ser Ala Met Lys Lys Ile Glu Asp Asn Asn Thr Leu Val Phe Ile Val
                                   90
               8.5
Asp Leu Lys Ala Asp Lys Lys Ile Lys Ala Ala Val Lys Lys Met
                    105
                                                110
           100
Tyr Asp Ile Gln Ala Lys Lys Val Asn Thr Leu Ile Arg Pro Asp Gly
                            120
        115
Lys Lys
    130
(2) INFORMATION FOR SEQ ID NO:4107:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 445 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..445
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579546
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4107: aaaaaaaaccc tactaaccgc gtctcctctc cagcgcccgc cgtcgccgcc gccctcctct tggtcccgcc gtccgtcgag gtcatcatgg tgagggtcag tgtgctcaac gatgcgctca agtccatgta caatgcagag aagaggggca agaggcaggt catgatcagg ccgtcgtcca

120

180

240

aggtgatcat caagtteetg aeggteatge agegteatgg ttagttetea atetegtgee 300 ccatttcaat tggcagcatt ccgaggatac gtacctgatt agtgctatat tattaggata cattggcgag ttcgagtacg tggatgacca cagagctggg aagattgtgg tggaactgaa 360 cggcagacta aacaaatgcg gtgtaattag cccccggttt gatgttgggg taaaggaaat 420 cgaaggctgg actgcgaggc tgctt (2) INFORMATION FOR SEQ ID NO:4108: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 73 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..73 (D) OTHER INFORMATION: / Ceres Seq. ID 1579547 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4108: Lys Asn Pro Thr Asn Arg Val Ser Ser Pro Ala Pro Ala Val Ala Ala 10 Ala Leu Leu Val Pro Pro Ser Val Glu Val Ile Met Val Arg Val 20 25 Ser Val Leu Asn Asp Ala Leu Lys Ser Met Tyr Asn Ala Glu Lys Arg 40 Gly Lys Arg Gln Val Met Ile Arg Pro Ser Ser Lys Val Ile Ile Lys Phe Leu Thr Val Met Gln Arg His Gly (2) INFORMATION FOR SEQ ID NO:4109: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 45 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..45 (D) OTHER INFORMATION: / Ceres Seq. ID 1579548 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4109: Met Val Arg Val Ser Val Leu Asn Asp Ala Leu Lys Ser Met Tyr Asn 10 Ala Glu Lys Arg Gly Lys Arg Gln Val Met Ile Arg Pro Ser Ser Lys 20 25 Val Ile Ile Lys Phe Leu Thr Val Met Gln Arg His Gly 40 (2) INFORMATION FOR SEQ ID NO:4110: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 463 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..463 (D) OTHER INFORMATION: / Ceres Seq. ID 1579569 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4110: acggcacacg gcttttggca gctacaaacc acccaaaagc cacccccaga aaccggcggt

cettgggtgt teeggatetg agecageage tgagaagagg atgagegeeg tggegecatg

gegaegtegt egetgaacee caaegegeeg etetteatee eggeggegta eeggeaggtg

gaggaattet egeeegagtg gtatgagete gteaacacca eegeetggtt eegggaccae

tggttccgcc agcaccagca ccacgaggcc gccttcgccg ccgccgca cgccgagctc 300 gacgtcgccg cgctcctcc cgacgactcc gtcgacctcc tcgacaccga cgacctcttc 360 tacgcgcctg acgtccacca ccccacaac gccaagccgg cgctgctgcc cgggtacgac 420 ctcgacatgc tcagggcgt gagcctcagc tcccccggg ccg

- (2) INFORMATION FOR SEQ ID NO:4111:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..115
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579570
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4111:

Met Ala Thr Ser Ser Leu Asn Pro Asn Ala Pro Leu Phe Ile Pro Ala 1 5 10 15

Ala Tyr Arg Gln Val Glu Glu Phe Ser Pro Glu Trp Tyr Glu Leu Val 20 25 30

Asn Thr Thr Ala Trp Phe Arg Asp His Trp Phe Arg Gln His Gln His $35 \hspace{1cm} 40 \hspace{1cm} 45$

His Glu Ala Ala Phe Ala Ala Ala Ala Asp Ala Glu Leu Asp Val Ala 50 55 60

Ala Leu Leu Pro Asp Asp Ser Val Asp Leu Leu Asp Thr Asp Asp Leu 65 70 75 80

Phe Tyr Ala Pro Asp Val His His Pro His Asn Ala Lys Pro Ala Leu 85 90 95

Leu Pro Gly Tyr Asp Leu Asp Met Leu Arg Ala Leu Ser Leu Ser Ser 100 105 110

Pro Arg Ala

115

- (2) INFORMATION FOR SEQ ID NO:4112:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 79 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..79
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579571
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4112:

Met Ser Ser Ser Thr Pro Pro Pro Gly Ser Gly Thr Thr Gly Ser Ala
1 5 10 15

Ser Thr Ser Thr Thr Arg Pro Pro Ser Pro Pro Pro Pro Thr Pro Ser 20 25 30

Ser Thr Ser Pro Arg Ser Ser Pro Thr Thr Pro Ser Thr Ser Ser Thr 35 40 45

Pro Thr Thr Ser Ser Thr Arg Leu Thr Ser Thr Thr Pro Thr Thr Pro 50 55 60

Ser Arg Arg Cys Cys Pro Gly Thr Thr Ser Thr Cys Ser Gly Arg 65 70 75

- (2) INFORMATION FOR SEQ ID NO:4113:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 478 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)

- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..478
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579576
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4113:

aaaaaaacgc	ccaccacgcc	gccactcgca	accgcacacc	agccctcgca	acccaccacc	60
acgtccgaga	cgtccgagat	ggagttcctc	gccgcgtacc	tgctgccgtg	cctgggcgcc	120
ggcccggccc	ccacgctccc	gaccaaggac	gacgtgcgtc	gcatcctgag	atccgtcagc	180
gccgaggtgg	aggaggaccg	cctcgacctg	gtcttcgccc	tcctagaggt	taaggacatc	240
gccgagctga	tcgccacggg	cggggagcat	ctcgcctacg	cgccgtcagg	agccgctgct	300
gccgtcgttg	ccactcctgc	cgctgccgag	gtcgaggagg	aggccacgaa	ggaggaggat	360
gaggacatcg	ccctcttcaa	cctcttcgac	tgatcgtgca	accctacgtg	gaccgatcga	420
tgccatcctc	gtccttgcct	gctgccgttt	gcttgttgct	ctgattgtac	attgtagt	

- (2) INFORMATION FOR SEQ ID NO:4114:
 - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 130 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..130
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579577
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4114:
- Lys Lys Thr Pro Thr Thr Pro Pro Leu Ala Thr Ala His Gln Pro Ser $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$
- Gln Pro Thr Thr Ser Glu Thr Ser Glu Met Glu Phe Leu Ala Ala 20 25 30
- Tyr Leu Leu Pro Cys Leu Gly Ala Gly Pro Ala Pro Thr Leu Pro Thr 35 40 45
- Lys Asp Asp Val Arg Arg Ile Leu Arg Ser Val Ser Ala Glu Val Glu 50 55 60
- Glu Asp Arg Leu Asp Leu Val Phe Ala Leu Leu Glu Val Lys Asp Ile 65 70 75 80
- Ala Glu Leu Ile Ala Thr Gly Gly Glu His Leu Ala Tyr Ala Pro Ser 85 90 95
- Gly Ala Ala Ala Val Val Ala Thr Pro Ala Ala Ala Glu Val Glu
 100 105 110
- Glu Glu Ala Thr Lys Glu Glu Asp Glu Asp Ile Ala Leu Phe Asn Leu 115 120 125

Phe Asp

130

- (2) INFORMATION FOR SEQ ID NO:4115:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 76 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..76
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579578
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4115:
- Lys Asn Ala His His Ala Ala Thr Arg Asn Arg Thr Pro Ala Leu Ala 1 5 10 15
- Thr His His Wal Arg Asp Val Arg Asp Gly Val Pro Arg Arg Val
 20 25 30
- Pro Ala Ala Val Pro Gly Arg Arg Pro Gly Pro His Ala Pro Asp Gln

(ii) MOLECULE TYPE: peptide

(A) NAME/KEY: peptide (B) LOCATION: 1..80

(D) OTHER INFORMATION: / Ceres Seq. ID 1579585

(ix) FEATURE:

Gly Arg Arg Ala Ser His Pro Glu Ile Arg Gln Arg Arg Gly Gly 55 Gly Pro Pro Arg Pro Gly Leu Arg Pro Pro Arg Gly 70 (2) INFORMATION FOR SEQ ID NO:4116: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 104 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..104 (D) OTHER INFORMATION: / Ceres Seq. ID 1579579 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4116: Met Glu Phe Leu Ala Ala Tyr Leu Leu Pro Cys Leu Gly Ala Gly Pro 1.0 Ala Pro Thr Leu Pro Thr Lys Asp Asp Val Arg Arg Ile Leu Arg Ser 20 25 30 Val Ser Ala Glu Val Glu Glu Asp Arg Leu Asp Leu Val Phe Ala Leu 40 Leu Glu Val Lys Asp Ile Ala Glu Leu Ile Ala Thr Gly Gly Glu His 55 60 Leu Ala Tyr Ala Pro Ser Gly Ala Ala Ala Ala Val Val Ala Thr Pro 70 75 Ala Ala Ala Glu Val Glu Glu Ala Thr Lys Glu Glu Asp Glu Asp 90 85 Ile Ala Leu Phe Asn Leu Phe Asp 100 (2) INFORMATION FOR SEQ ID NO:4117: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 448 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..448 (D) OTHER INFORMATION: / Ceres Seq. ID 1579584 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4117: getgtettte ttetgetett ceategegee agtgttttga gaagetggte ggegeteeta 60 gatecetteg cetetetege gttegagget aggtageege caccatgage egetegggge 120 agcctccgga tctcaagaag tacatggaca agaagcttca gattaagctg aatgcaaacc 180 gtgttgttat tggcacactt cggggattcg accagttcat gaatctggtg atcgacaaca 240 ctgtggaggt caatggaaat gacaagacag atattggaat ggtggttatc aggggaaaca 300 gtgttgtcat gatcgaggca ctggagccag ttgccaagtc gcagtgaatc cttatttttc 360 agctgatata gtcgcagcat gaaaactgat gtaaatgcta tgagtgaacc ctgttgtact 420 tgcatttgta attgaagtct gtcgcttt (2) INFORMATION FOR SEQ ID NO:4118: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 80 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear

 (xi)
 SEQUENCE DESCRIPTION: SEQ ID NO:4118:

 Met
 Ser
 Arg
 Gly
 Gln
 Pro
 Pro
 Asp
 Leu
 Lys
 Tyr
 Met
 Asp
 Lys

 1
 5
 10
 15
 15

 Lys
 Leu
 Gln
 Ile
 Lys
 Leu
 Asn
 Arg
 Val
 Val
 Ile
 Gly
 Thr
 Leu

 Arg
 Gly
 Phe
 Asp
 Gln
 Phe
 Met
 Asn
 Leu
 Val
 Ile
 Asp
 Asn
 Thr
 Val
 Ala
 Lys
 Gly

 Val
 Asn
 Ser
 Val
 Val
 Nal
 Leu
 Glu
 Pro
 Val
 Ala
 Lys
 Ser
 Gln

- (2) INFORMATION FOR SEQ ID NO:4119:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..67
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579586
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4119:

Met Asp Lys Leu Gln Ile Lys Leu Asn Ala Asn Arg Val Val Ile

5 10 15

Gly Thr Leu Arg Gly Phe Asp Gln Phe Met Asn Leu Val Ile Asp Asn 20 25 30

Thr Val Glu Val Asn Gly Asn Asp Lys Thr Asp Ile Gly Met Val Val 35 40 45

Ile Arg Gly Asn Ser Val Val Met Ile Glu Ala Leu Glu Pro Val Ala 50 55 60

Lys Ser Gln

65

- (2) INFORMATION FOR SEQ ID NO:4120:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 42 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..42
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579587
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4120:

Met Asn Leu Val Ile Asp Asn Thr Val Glu Val Asn Gly Asn Asp Lys

5 10 15

Thr Asp Ile Gly Met Val Val Ile Arg Gly Asn Ser Val Val Met Ile 20 25 30

Glu Ala Leu Glu Pro Val Ala Lys Ser Gln

- (2) INFORMATION FOR SEQ ID NO:4121:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 517 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..517
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579596
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4121:

ccgtgaaacc aacgcccctc tctccccqcq cacqaqaccc atcqcqaatg qaagttqctc 60 ctgeggtgaa geaactecte eccatqqeqe aqqqeeccaa etceceqtee tectecacea 120 cotectecte geoetegeee teggeegeeg egeegteeee geogeegege cageageagt 180 cgcaqtcgca qqcqcccqtq ccqcqcatca tcqacaccac qcccttcccc accaccttcq 240 tgcaggccga cacggccagc ttcaaggagg tcgtccagag gctcaccggc tccgacacgc 300 cgccgcctqc ccaqaaqccc qccaaqaccc acqqccacca ccaccaccac cacqqcqqcq 360 gcggcgtcgg gcccaagaag ccggccttca agctctacga gcgccggatc ggcaagaaca 420 acctcaagat gategegeeg etggegggge egtegeegeg gaaggeggeg eeggaggtge 480 tgtcgcccag cgtgctcgac ttccctttcn ctggcgc

- (2) INFORMATION FOR SEQ ID NO:4122:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 172 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..172
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579597
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4122:

Arg Glu Thr Asn Ala Pro Leu Ser Pro Arg Thr Arg Pro Ile Ala Asn 1 5 10 15

Gly Ser Cys Ser Cys Gly Glu Ala Thr Pro Pro His Gly Ala Gly Pro 20 25 30

Gln Leu Pro Val Leu Leu His His Leu Leu Leu Ala Leu Gly 35 40 45

Arg Arg Ala Val Pro Ala Ala Pro Ala Ala Val Ala Gly 50 55 60

Ala Arg Ala Ala His His Arg His His Ala Leu Pro His His Leu Arg 65 70 75 80

Ala Gly Arg His Gly Gln Leu Gln Gly Gly Arg Pro Glu Ala His Arg 85 90 95

Leu Arg His Ala Ala Ala Cys Pro Glu Ala Arg Gln Asp Pro Arg Pro
100 105 110

Pro Pro Pro Pro Arg Arg Arg Arg Arg Ala Gln Glu Ala Gly 115 120 125

Leu Gln Ala Leu Arg Ala Pro Asp Arg Gln Glu Gln Pro Gln Asp Asp 130 135 140

Arg Ala Ala Gly Gly Ala Val Ala Ala Glu Gly Gly Ala Gly Gly Ala 145 \$150\$

- Val Ala Gln Arg Ala Arg Leu Pro Phe Xaa Trp Arg 165 170
- (2) INFORMATION FOR SEQ ID NO:4123:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 171 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..171
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579598
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4123:
- Val Lys Pro Thr Pro Leu Ser Pro Arg Ala Arg Asp Pro Ser Arg Met
 1 5 10 15

Glu Val Ala Pro Ala Val Lys Gln Leu Leu Pro Met Ala Gln Gly Pro Asn Ser Pro Ser Ser Ser Thr Thr Ser Ser Pro Ser Pro Ser Ala Ala Ala Pro Ser Pro Pro Pro Arg Gln Gln Ser Gln Ser Gln Ala Pro Val Pro Arg Ile Ile Asp Thr Thr Pro Phe Pro Thr Thr Phe Val 70 75 Gln Ala Asp Thr Ala Ser Phe Lys Glu Val Val Gln Arg Leu Thr Gly 90 Ser Asp Thr Pro Pro Pro Ala Gln Lys Pro Ala Lys Thr His Gly His 100 105 His His His His Gly Gly Gly Val Gly Pro Lys Lys Pro Ala

120

Phe Lys Leu Tyr Glu Arg Arg Ile Gly Lys Asn Asn Leu Lys Met Ile 135 140

Ala Pro Leu Ala Gly Pro Ser Pro Arg Lys Ala Ala Pro Glu Val Leu 150 155

Ser Pro Ser Val Leu Asp Phe Pro Phe Xaa Gly 165

- (2) INFORMATION FOR SEQ ID NO:4124:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 156 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..156
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579599
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4124:

Met Glu Val Ala Pro Ala Val Lys Gln Leu Leu Pro Met Ala Gln Gly 10

Pro Asn Ser Pro Ser Ser Ser Thr Thr Ser Ser Ser Pro Ser Pro Ser 20 25

Ala Ala Pro Ser Pro Pro Pro Arq Gln Gln Ser Gln Ser Gln 40

Ala Pro Val Pro Arg Ile Ile Asp Thr Thr Pro Phe Pro Thr Thr Phe 55

Val Gln Ala Asp Thr Ala Ser Phe Lys Glu Val Val Gln Arg Leu Thr 70 75

Gly Ser Asp Thr Pro Pro Pro Ala Gln Lys Pro Ala Lys Thr His Gly 90

His His His His His Gly Gly Gly Val Gly Pro Lys Lys Pro 105

Ala Phe Lys Leu Tyr Glu Arg Arg Ile Gly Lys Asn Asn Leu Lys Met 120 Ile Ala Pro Leu Ala Gly Pro Ser Pro Arg Lys Ala Ala Pro Glu Val

135

Leu Ser Pro Ser Val Leu Asp Phe Pro Phe Xaa Gly 150 155

- (2) INFORMATION FOR SEQ ID NO:4125:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 487 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -

- (B) LOCATION: 1..487
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579610
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4125:

attocgagto tactattgta cototocgtg ggggcgatoc gccatttgtg ccaattotag 60 catcagcgtc cgatcgacca ggagtgtgaa gtaggtgtgg gagatcaagg gcacgagcga 120 cccggccaag tttagtgtgg attttaaaat caagttcctt acagttggtg gaaagaaact 180 aaagttgaca atatgggata ccgctggcca ggagaggttt aggacaataa ctagttctta 240 ctacagaggt gctcagggaa ttattttagt atatgatgtc acaaagagag agagtttctc 300 aaatttggct gatgtttgga ctaaggaaat agaagcaaac tcaacaaaca aagactgcat 360 aaaaatgctt gttggaaaca aagttgacaa ggatgatgaa agaatggtca cagaagaaga 420 aggtcttgct tttgctgaag aatctggttg tctgtttctt gagagcagtg caaaacacga 480 gaaaatg

- (2) INFORMATION FOR SEQ ID NO:4126:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 30 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..30
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579611
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4126:

Phe Arg Val Tyr Tyr Cys Thr Ser Pro Trp Gly Arg Ser Ala Ile Cys
1 5 10 15

Ala Asn Ser Ser Ile Ser Val Arg Ser Thr Arg Ser Val Lys
20 25 30

- (2) INFORMATION FOR SEQ ID NO:4127:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 41 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..41
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579612
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4127:

Met Leu Val Gly Asn Lys Val Asp Lys Asp Asp Glu Arg Met Val Thr 1 $51015151015151015101015101$

Glu Glu Glu Gly Leu Ala Phe Ala Glu Glu Ser Gly Cys Leu Phe Leu
20 25 30

Glu Ser Ser Ala Lys His Glu Lys Met

35 40

- (2) INFORMATION FOR SEQ ID NO:4128:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 31 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..31
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579613
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4128:

Met Met Lys Glu Trp Ser Gln Lys Lys Lys Val Leu Leu Leu Lys 1 5 10 15

Asn Leu Val Val Cys Phe Leu Arg Ala Val Gln Asn Thr Arg Lys

20 25 30

- (2) INFORMATION FOR SEQ ID NO:4129:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 490 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..490
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579614
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4129:

agtggccgcc cgtgtcgtgt agtgtgtagt cgcagcagct agcgcccggc cggccagtcg 60 agtgagtcca tectecateg ceatecaatg geogecaceg cetgageatg ageatectee 120 gcgcgccgcc gccctgcttc tcgtccccac tcaggctcag ggtcgcggtt gccaagccgc 180 240 tggcggcccc catgcggcgc cagctgctgc gcgcgcaggc cacctacaac gtgaagctga tcacgccgga gggggaggtg gagctgcagg tgcccgacga cgtctacatc ctggacttcg 300 ccgaggagga aggcatcgac ctgcccttct cctgccgtgc ggggtcctgc tcctcctgcg 360 ccggcaaggt cgtctctggc tccgtcgacc agtccgacca gagcttcctc aacgacaacc 420 aggtegeega eggttgggtg etcaetgege tgegtaeece aceteegaeg tegteatega 480 gacgcacaag

- (2) INFORMATION FOR SEQ ID NO:4130:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 127 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..127
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579615
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4130:

Met Ser Ile Leu Arg Ala Pro Pro Cys Phe Ser Ser Pro Leu Arg
1 5 10 15

Leu Arg Val Ala Val Ala Lys Pro Leu Ala Ala Pro Met Arg Arg Gln
20 25 30

Leu Leu Arg Ala Gln Ala Thr Tyr Asn Val Lys Leu Ile Thr Pro Glu 35 40 45

Gly Glu Val Glu Leu Gln Val Pro Asp Asp Val Tyr Ile Leu Asp Phe 50 55 60

Ala Glu Glu Gly Ile Asp Leu Pro Phe Ser Cys Arg Ala Gly Ser 65 70 75 80

Cys Ser Ser Cys Ala Gly Lys Val Val Ser Gly Ser Val Asp Gln Ser 85 90 95

Asp Gln Ser Phe Leu Asn Asp Asn Gln Val Ala Asp Gly Trp Val Leu 100 105 110

Thr Ala Leu Arg Thr Pro Pro Pro Thr Ser Ser Ser Arg Arg Thr 115 120 125

- (2) INFORMATION FOR SEQ ID NO:4131:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 99 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..99
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579616

 (xi)
 SEQUENCE DESCRIPTION:
 SEQ ID NO:4131:

 Met
 Arg
 Arg
 Gln
 Leu
 Arg
 Ala
 Gln
 Ala
 Thr
 Tyr
 Asn
 Val
 Lys
 Leu

 Ile
 Thr
 Pro
 Glu
 Glu
 Val
 Glu
 Leu
 Gln
 Val
 Pro
 Asp
 Asp
 Val
 Tyr
 30

 Ile
 Leu
 Asp
 Phe
 Ala
 Glu
 Glu
 Glu
 Gly
 Ile
 Asp
 Leu
 Pro
 Phe
 Ser
 Cys

 Arg
 Ala
 Gly
 Ser
 Cys
 Ala
 Gly
 Lys
 Val
 Val
 Ser
 Gly
 Ser

 Arg
 Ala
 Gly
 Ser
 Phe
 Leu
 Asp
 Asp
 Asp
 Gly
 Ser
 Gly
 Val
 Val
 Val
 Ser
 Gly
 Ser
 Gly
 Val
 Val
 Val
 Val
 Val
 Asp
 Gly
 Ser
 Gly
 Ser
 Fro
 Fro
 Fro
 Fro
 Fro
 Fro
 Fro
 Fro

Arg Arg Thr

- (2) INFORMATION FOR SEQ ID NO:4132:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 468 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..468
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579618
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4132: acacaatttc accgaaatcc tccaataccc caccctacga atcttcttct cgggctcctt 60 ctgcgccatc ttctggctca agaagcgcgg cctcatgccg ggcctcactt tctctaatga 120 geteatetee egggaegagg geetecaetg egaettegee tgeeteettt atgaeeteet 180 teggggeaag etegatgagt eeegegteeg egagategtt geegaegeeg tegacatega 240 gcgtgagttc gtttgcgacg cgctccccgt cgcgctggtc ggaatgaacg gcgggctcat 300 qaqccaqtac atcqaqttcq tcgccgaccg cctgctcatg gcgctggggc acaggaagat 360 qtacaacqtc qccaacccct tcqactqqat qgaqctcatt tccctqcagq ccaaaqacta 420 acttetttga gaagegegte gggwagtace agaaggegte egtaatgt
- (2) INFORMATION FOR SEQ ID NO:4133:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 139 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..139
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579619
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4133:
- His Asn Phe Thr Glu Ile Leu Gln Tyr Pro Thr Leu Arg Ile Phe Phe $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$
- Ser Gly Ser Phe Cys Ala Ile Phe Trp Leu Lys Lys Arg Gly Leu Met 20 25 30
- Pro Gly Leu Thr Phe Ser Asn Glu Leu Ile Ser Arg Asp Glu Gly Leu 35 40 45
- His Cys Asp Phe Ala Cys Leu Leu Tyr Asp Leu Leu Arg Gly Lys Leu 50 55 60
- Asp Glu Ser Arg Val Arg Glu Ile Val Ala Asp Ala Val Asp Ile Glu 65 70 75 80
- Arg Glu Phe Val Cys Asp Ala Leu Pro Val Ala Leu Val Gly Met Asn 85 90 95
- Gly Gly Leu Met Ser Gln Tyr Ile Glu Phe Val Ala Asp Arg Leu Leu
 100 105 110

Met Ala Leu Gly His Arg Lys Met Tyr Asn Val Ala Asn Pro Phe Asp 115 120 125

Trp Met Glu Leu Ile Ser Leu Gln Ala Lys Asp 130 135

- (2) INFORMATION FOR SEQ ID NO:4134:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 94 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..94
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579620
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4134:

Thr Ile Ser Pro Lys Ser Ser Asn Thr Pro Pro Tyr Glu Ser Ser Ser 1 10 15

Arg Ala Pro Ser Ala Pro Ser Ser Gly Ser Arg Ser Ala Ala Ser Cys $20 \hspace{1cm} 25 \hspace{1cm} 30$

Arg Ala Ser Leu Ser Leu Met Ser Ser Ser Pro Gly Thr Arg Ala Ser 35 40 45

Thr Ala Thr Ser Pro Ala Ser Phe Met Thr Ser Phe Gly Ala Ser Ser 50 55 60

Met Ser Pro Ala Ser Ala Arg Ser Leu Pro Thr Pro Ser Thr Ser Ser 65 70 75 80

- Val Ser Ser Phe Ala Thr Arg Ser Pro Ser Arg Trp Ser Glu 85 90
- (2) INFORMATION FOR SEQ ID NO:4135:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..108
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579621
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4135:

Met Pro Gly Leu Thr Phe Ser Asn Glu Leu Ile Ser Arg Asp Glu Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Leu His Cys Asp Phe Ala Cys Leu Leu Tyr Asp Leu Leu Arg Gly Lys
20 25 30

Leu Asp Glu Ser Arg Val Arg Glu Ile Val Ala Asp Ala Val Asp Ile 35 40 45

Glu Arg Glu Phe Val Cys Asp Ala Leu Pro Val Ala Leu Val Gly Met 50 55 60

Asn Gly Gly Leu Met Ser Gln Tyr Ile Glu Phe Val Ala Asp Arg Leu 65 70 75 80

Leu Met Ala Leu Gly His Arg Lys Met Tyr Asn Val Ala Asn Pro Phe
85 90 95

Asp Trp Met Glu Leu Ile Ser Leu Gln Ala Lys Asp 100 105

- (2) INFORMATION FOR SEQ ID NO:4136:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)

- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..445
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579629
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4136:

aaggccagtc tgagtgtgcg ttcgattcgc ttgtgctgca gctagggttt agaggttttc 60 tgggcgcgga gcgggaggcg gcggcgcta tggctgcggc ggaggaggag atcgcggtg aggaggcgct tggctgcggc catctacgtc aagctccgat 180 ccgaccgcga gctgcgcggc aagctccatg cgtatgatca acatttaaac atgatacttg 240 gagatgttga agaggtcgtg acaactgttg agatagatga tgaaacatat gaagaaattg 180 tggtgcgataa tctttgcaga ccacgaaacg cactatcccc tttctttttg tccgaggtga 360 tggtgtcata ttggtttctc caccccttcg tacggcayga astttgaagt tagatcatgc 420 tggttgttaa ttatgataac tggtg

- (2) INFORMATION FOR SEQ ID NO:4137:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 134 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..134
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579630
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4137:

Gly Gln Ser Glu Cys Ala Phe Asp Ser Leu Val Leu Gln Leu Gly Phe 1 5 10 15

Arg Gly Phe Leu Gly Ala Glu Arg Glu Ala Ala Ala Ala Met Ala Ala 20 25 30

Ala Glu Glu Glu Ile Ala Val Lys Glu Pro Leu Asp Leu Ile Arg Leu 35 40 45

Ser Leu Asp Glu Arg Ile Tyr Val Lys Leu Arg Ser Asp Arg Glu Leu 50 55 60

Arg Gly Lys Leu His Ala Tyr Asp Gln His Leu Asn Met Ile Leu Gly 65 70 75 80

Asp Val Glu Glu Val Val Thr Thr Val Glu Ile Asp Asp Glu Thr Tyr 85 90 95

Glu Glu Ile Val Arg Asp Asn Leu Cys Arg Pro Arg Asn Ala Leu Ser 100 105 110

Pro Phe Phe Leu Ser Glu Val Met Val Ser Tyr Trp Phe Leu His Pro 115 120 125

Phe Val Arg Xaa Glu Xaa 130

- (2) INFORMATION FOR SEQ ID NO:4138:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 105 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..105
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579631
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4138:

Met Ala Ala Glu Glu Glu Ile Ala Val Lys Glu Pro Leu Asp Leu 1 5 10 15

Ile Arg Leu Ser Leu Asp Glu Arg Ile Tyr Val Lys Leu Arg Ser Asp 20 25 30

Arg Glu Leu Arg Gly Lys Leu His Ala Tyr Asp Gln His Leu Asn Met 35 40 45

```
Ile Leu Gly Asp Val Glu Glu Val Val Thr Thr Val Glu Ile Asp Asp
                        55
Glu Thr Tyr Glu Glu Ile Val Arg Asp Asn Leu Cys Arg Pro Arg Asn
                    7.0
                                        75
Ala Leu Ser Pro Phe Phe Leu Ser Glu Val Met Val Ser Tyr Trp Phe
                85
                                     90
Leu His Pro Phe Val Arg Xaa Glu Xaa
            100
(2) INFORMATION FOR SEQ ID NO:4139:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 408 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..408
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579632
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4139:
atataaaagc tgccctcgcg acctagcacc agccctgcca ctccactcct accccacaca
gaagcggcgg cggcggagca aasgcaggcg aaggcgaggg tgtgagggaa ggagcaccag
ccatggtgca cgtcaacttc taccgcaact atggtaagac gttcaagaaa ccaaggcgtc
cttatgagaa ggagcgtctt gatgctgaac tgaagctggt cggtgagtat gggctgaggt
gcaagcgtga gctttggagg gtccagtatg cactgagcag gatccgtaat gctgcaaggc
                                                                       300
acttgctcac cettgacgag aagaaccee gtegtatett tgagggtgag gegettette
gccgcatgaa ccgctatggg ctgcttgctg agggtcagaa caagcttg
(2) INFORMATION FOR SEQ ID NO:4140:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 51 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..51
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579633
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4140:
Tyr Lys Ser Cys Pro Arg Asp Leu Ala Pro Ala Leu Pro Leu His Ser
                                    10
Tyr Pro Thr Gln Lys Arg Arg Arg Arg Ser Lys Xaa Arg Arg Arg Arg
Gly Cys Glu Gly Arg Ser Thr Ser His Gly Ala Arg Gln Leu Leu Pro
Gln Leu Trp
    50
(2) INFORMATION FOR SEQ ID NO:4141:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 95 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..95
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579634
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4141:

Met Val His Val Asn Phe Tyr Arg Asn Tyr Gly Lys Thr Phe Lys Lys

Pro Arg Arg Pro Tyr Glu Lys Glu Arg Leu Asp Ala Glu Leu Lys Leu 20 25 30

Val Gly Glu Tyr Gly Leu Arg Cys Lys Arg Glu Leu Trp Arg Val Gln 35 40 45

Tyr Ala Leu Ser Arg Ile Arg Asn Ala Ala Arg His Leu Leu Thr Leu 50 55 60

Asp Glu Lys Asn Pro Arg Arg Ile Phe Glu Gly Glu Ala Leu Leu Arg 65 70 75 80

Arg Met Asn Arg Tyr Gly Leu Leu Ala Glu Gly Gln Asn Lys Leu 85 90 95

- (2) INFORMATION FOR SEQ ID NO:4142:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 467 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..467
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579635
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4142:

cgaaaaatcc atcgagctgc ccgcgcgcgg cagttaagct cacacatcag ctagctcacc 60 ttggacggcc gaccaggtac gttgcgagcg atggcgggat acaaagcgtc gggcggcacg 120 gcgctcggcg tcgtcctggc tgttgccgcg ctcctcgccg cggcggcgat ggcggtggac 180 gacgagcaca tgtaccactg gaagtgcttc aactcgtgca cggggaagtg ccgcgacgag 240 gacgcctttg acgacggca ccgttccggg gattcgaacg tctcttccgt cgtctctggc ggcaagtgca acaacaggtg cctcagcgag tgcttcgagg acctgccggc catctgctac 360 caccagtgcg tcgtcagcaa gtgcctctgc ttcccaccct ttagcaaaga gaaaacgatg 420 tgcatgaaga gctgctgcaa caagtgcttc caccacggcc cgccagc

- (2) INFORMATION FOR SEQ ID NO:4143:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..125
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579636
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4143:

Met Ala Gly Tyr Lys Ala Ser Gly Gly Thr Ala Leu Gly Val Val Leu

5 10 15

Ala Val Ala Ala Leu Leu Ala Ala Ala Ala Met Ala Val Asp Asp Glu 20 25 30

His Met Tyr His Trp Lys Cys Phe Asn Ser Cys Thr Gly Lys Cys Arg 35 40 45

Asp Glu Asp Ala Phe Asp Asp Gly His Arg Ser Gly Asp Ser Asn Val 50 55 60

Ser Ser Val Val Ser Gly Gly Lys Cys Asn Asn Arg Cys Leu Ser Glu 65 70 75 80

Cys Phe Glu Asp Leu Pro Ala Ile Cys Tyr His Gln Cys Val Val Ser 85 90 95

Lys Ser Cys Cys Asn Lys Cys Phe His His Gly Pro Pro 115 120 125

- (2) INFORMATION FOR SEQ ID NO:4144:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 99 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..99
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579637
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4144:

Met Ala Val Asp Asp Glu His Met Tyr His Trp Lys Cys Phe Asn Ser

1 10 15

Cys Thr Gly Lys Cys Arg Asp Glu Asp Ala Phe Asp Asp Gly His Arg 20 25 30

Ser Gly Asp Ser Asn Val Ser Ser Val Val Ser Gly Gly Lys Cys Asn 35 40 45

Asn Arg Cys Leu Ser Glu Cys Phe Glu Asp Leu Pro Ala Ile Cys Tyr 50 60

His Gln Cys Val Val Ser Lys Cys Leu Cys Phe Pro Pro Phe Ser Lys 65 70 75 80

Glu Lys Thr Met Cys Met Lys Ser Cys Cys Asn Lys Cys Phe His His 85 90 95

Gly Pro Pro

- (2) INFORMATION FOR SEQ ID NO:4145:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 92 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..92
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579638
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4145:

Met Tyr His Trp Lys Cys Phe Asn Ser Cys Thr Gly Lys Cys Arg Asp 1 5 10 15

Glu Asp Ala Phe Asp Asp Gly His Arg Ser Gly Asp Ser Asn Val Ser 20 25 30

Ser Val Val Ser Gly Gly Lys Cys Asn Asn Arg Cys Leu Ser Glu Cys 35 40 45

Phe Glu Asp Leu Pro Ala Ile Cys Tyr His Gln Cys Val Val Ser Lys 50 55 60

Cys Leu Cys Phe Pro Pro Phe Ser Lys Glu Lys Thr Met Cys Met Lys 65 70 75 80

Ser Cys Cys Asn Lys Cys Phe His His Gly Pro Pro 85 90

- (2) INFORMATION FOR SEQ ID NO:4146:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 450 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..450
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579643
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4146:

atccggtccg gacacccgag taccgacctg cttgctcatc gcgcgcaccc gccaaagcaa ccaaccgccc catcgtccc gtcctgttcc ggcaggcagc cgctcccgct cccgctcccc

caccccactc cccctcgcgc ggcgcgttct cagatccccc gcccggttgg caccggcacc 180 ccggtccgaa atgcgaggag ccttgtagcg cctcggagca cggacggaat cgcgccgcat 240 gcatcccaag cccgagggcg gcggcgacga cgacggggcc gccgcggagg tgggctcccc 300 qcqqtccqqc tacttccqqc aqcqqaqcat qcacqccqcc qccqccqccq cqqatccqqa 360 ggeggegege eggeegttee acgtegagaa eccgeettge teegeeggeg gggggetgeg 420 gccagcgagt ccgtcaccaa gctggagtcg

- (2) INFORMATION FOR SEQ ID NO:4147:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 150 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..150
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579644
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4147:

Ile Arg Ser Gly His Pro Ser Thr Asp Leu Leu Ala His Arg Ala His 10

Pro Pro Lys Gln Pro Thr Ala Pro Ser Ser Pro Ser Cys Ser Gly Arg 20 2.5

Gln Pro Leu Pro Leu Pro His Pro Thr Pro Pro Arg Ala Ala 40

Arg Ser Gln Ile Pro Arg Pro Val Gly Thr Gly Thr Pro Val Arg Asn 55 Ala Arg Ser Leu Val Ala Pro Arg Ser Thr Asp Gly Ile Ala Pro His

70 75 Ala Ser Gln Ala Arg Gly Arg Arg Arg Arg Arg Gly Arg Gly

90 Gly Gly Leu Pro Ala Val Arg Leu Leu Pro Ala Ala Glu His Ala Arg

105 Arg Arg Arg Arg Gly Ser Gly Gly Gly Ala Pro Ala Val Pro Arg

115 120 125

Arg Glu Pro Ala Leu Leu Arg Arg Gly Ala Ala Ser Glu Ser 130 135

Val Thr Lys Leu Glu Ser 145

150

- (2) INFORMATION FOR SEQ ID NO:4148:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 149 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..149
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579645
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4148:

Pro Val Arg Thr Pro Glu Tyr Arg Pro Ala Cys Ser Ser Arg Ala Pro 10

Ala Lys Ala Thr Asn Arg Pro Ile Val Pro Val Leu Phe Arg Gln Ala 2.5

Ala Ala Pro Ala Pro Ala Pro Pro Pro His Ser Pro Ser Arg Gly Ala 40

Phe Ser Asp Pro Pro Pro Gly Trp His Arg His Pro Gly Pro Lys Cys 55 60

Glu Glu Pro Cys Ser Ala Ser Glu His Gly Arg Asn Arg Ala Ala Cys 75 70

Ile Pro Ser Pro Arg Ala Ala Ala Thr Thr Gly Pro Pro Arg Arg

85 90 Trp Ala Pro Arg Gly Pro Ala Thr Ser Gly Ser Gly Ala Cys Thr Pro 100 105 110 Pro Pro Pro Arg Ile Arg Arg Arg Ala Gly Arg Ser Thr Ser 120 Arg Thr Arg Leu Ala Pro Pro Ala Gly Gly Cys Gly Gln Arg Val Arg His Gln Ala Gly Val 145 (2) INFORMATION FOR SEQ ID NO:4149: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 475 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..475 (D) OTHER INFORMATION: / Ceres Seq. ID 1579646 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4149: cttcgacggc cacggcggcg ccgaggtggc cagctactgc cgggagaggc tccaggtgct cctgaggcag gaactgaggc tgctcagcaa ggatttgggg gagacaagcg aggccgacat qaaqqaqcac tqqqacqaqc tqttcaccaq qtqtttccaq aggctggatq acqaaqtgtc qqqqcaqqcq aqcaqqctcq tcqqtqqcqt ccaqqaqaca cqqccqqtqq ccqccqaqaa egteggetee actgeggttq tegeogtegt gtgeteetee catgtggtgg tegecaactg 300 cggggattcg cgtgttgttc tctgccgtgg aaaggagccc ttagagctgt cgattgatca 360 taaggtgagc ttttttgtag ctaagctgga gctatgatgc ttatggtgtt catccgattt 420 ggttgtttca gcctgacagg aaggatgaac gagcgaggat tgaggccctg ggggg (2) INFORMATION FOR SEQ ID NO:4150: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 131 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..131 (D) OTHER INFORMATION: / Ceres Seq. ID 1579647 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4150: Phe Asp Gly His Gly Gly Ala Glu Val Ala Ser Tyr Cys Arg Glu Arg 10 Leu Gln Val Leu Leu Arg Gln Glu Leu Arg Leu Leu Ser Lys Asp Leu 25 Gly Glu Thr Ser Glu Ala Asp Met Lys Glu His Trp Asp Glu Leu Phe 40 Thr Arg Cys Phe Gln Arg Leu Asp Asp Glu Val Ser Gly Gln Ala Ser Arg Leu Val Gly Gly Val Gln Glu Thr Arg Pro Val Ala Ala Glu Asn 70 75 Val Gly Ser Thr Ala Val Val Ala Val Val Cys Ser Ser His Val Val 90 Val Ala Asn Cys Gly Asp Ser Arg Val Val Leu Cys Arg Gly Lys Glu

105 Pro Leu Glu Leu Ser Ile Asp His Lys Val Ser Phe Phe Val Ala Lys 120

Leu Glu Leu 130

115

(2) INFORMATION FOR SEQ ID NO:4151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 92 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..92
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579648
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4151:

Met Lys Glu His Trp Asp Glu Leu Phe Thr Arg Cys Phe Gln Arg Leu
1 10 15

Asp Asp Glu Val Ser Gly Gln Ala Ser Arg Leu Val Gly Gly Val Gln 20 25 30

Glu Thr Arg Pro Val Ala Ala Glu Asn Val Gly Ser Thr Ala Val Val 35 40 45

Ala Val Val Cys Ser Ser His Val Val Val Ala Asn Cys Gly Asp Ser 50 55 60

Arg Val Val Leu Cys Arg Gly Lys Glu Pro Leu Glu Leu Ser Ile Asp 65 70 75 80

His Lys Val Ser Phe Phe Val Ala Lys Leu Glu Leu 85 90

- (2) INFORMATION FOR SEQ ID NO:4152:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 420 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..420
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579700
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4152:

aaaaaaaaaa cacggtacge getteteete etegettgee geegeegeeg eegeegegat 60 ggaaaaggag aagetetegt tetecatate eteetegaag eageggeee eeaageetee 120 egeaegaeet geggeegeeg eagaegaega tgaceteege teegegeeeg eteegggeea 180 geagtacgte acegagtteg ateegteea aaceetagee geegeetgeg eggegegege 240 egteategeg eegeteeca acteeggeaa etyceteace eacegeeae geaaacegte 300 etegeteec aceeetgagg aggaggeege eetegeegeg gaateeggeg getggggee 220 eggyttegte etegacaeet egaeegtee egaagaeeca teateeaaaa teggetaegg 420

- (2) INFORMATION FOR SEQ ID NO:4153:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 139 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..139
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579701
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4153:

Lys Lys Thr His Gly Thr Arg Phe Ser Ser Ser Leu Ala Ala Ala 1 5 10 15

Ala Ala Met Glu Lys Glu Lys Leu Ser Phe Ser Ile Ser Ser Ser 20 25 30

Lys Gln Arg Pro Pro Lys Pro Pro Ala Arg Pro Ala Ala Ala Asp 35 40 45

Asp Asp Asp Leu Arg Ser Ala Pro Ala Pro Gly Gln Gln Tyr Val Thr

115

50 55 60 Glu Phe Asp Pro Ser Gln Thr Leu Ala Ala Ala Cys Ala Ala Arg Ala 70 75 Val Ile Ala Pro Leu Pro Asn Ser Gly Asn Xaa Leu Thr His Arg Pro 90 Arg Lys Pro Ser Ser Leu Pro Thr Pro Glu Glu Glu Ala Ala Leu Ala 105 Ala Glu Ser Gly Gly Trp Gly Pro Xaa Phe Val Leu Asp Thr Ser Thr 120 Ala Pro Glu Asp Pro Ser Ser Lys Ile Gly Tyr 130 135 (2) INFORMATION FOR SEQ ID NO:4154: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 71 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..71 (D) OTHER INFORMATION: / Ceres Seq. ID 1579702 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4154: Lys Lys His Thr Val Arg Ala Ser Pro Pro Arg Leu Pro Pro Pro Pro 10 Pro Pro Arg Trp Lys Arg Arg Ser Ser Arg Ser Pro Tyr Pro Pro Arg 20 25 Ser Ser Gly Pro Pro Ser Leu Pro His Asp Leu Arg Pro Pro Gln Thr 40 Thr Met Thr Ser Ala Pro Arg Pro Leu Arg Ala Ser Ser Thr Ser Pro 55 Ser Ser Ile Arg Pro Lys Pro 70 (2) INFORMATION FOR SEQ ID NO:4155: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 120 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..120 (D) OTHER INFORMATION: / Ceres Seq. ID 1579703 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4155: Met Glu Lys Glu Lys Leu Ser Phe Ser Ile Ser Ser Lys Gln Arg 10 Pro Pro Lys Pro Pro Ala Arg Pro Ala Ala Ala Ala Asp Asp Asp Asp 25 Leu Arg Ser Ala Pro Ala Pro Gly Gln Gln Tyr Val Thr Glu Phe Asp 40 Pro Ser Gln Thr Leu Ala Ala Cys Ala Ala Arg Ala Val Ile Ala 55 Pro Leu Pro Asn Ser Gly Asn Xaa Leu Thr His Arg Pro Arg Lys Pro 70 75 Ser Ser Leu Pro Thr Pro Glu Glu Glu Ala Ala Leu Ala Ala Glu Ser 85 90 Gly Gly Trp Gly Pro Xaa Phe Val Leu Asp Thr Ser Thr Ala Pro Glu 100 105 Asp Pro Ser Ser Lys Ile Gly Tyr

- (2) INFORMATION FOR SEQ ID NO:4156:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 451 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..451
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579709
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4156:

atgctggaga tgatgataat gatgatgatg atgatgaacc tcctcttaat gaagacgacg 60 acgaggagtt agatgacctt gagcaagggg aggatgaacc tmacacacaa catcttgtac 120 ttgcacaatt tgataaagtg tcaaggacca agaatcgttg gaagtgcacc ttgaaggatg 180 gaatcatgca tttgaatggc agggatgtcc tttttaacaa ggcgacaggt gagtttgatt 240 ttgattttt tggatgaaga tgagctattt tagaaggagg tgtatggaca tatctttgtc 300 ttgacataag gacagggagg tgacagtgtt cttggtgggg tcctggcagc atgactgcgt 360 cgtgttttct ttcctattga atcttcgtc caccctcttg tttgtcaccg caactgttat 420 cgctgtaaag aagttactgc ttgtgctgtg c

- (2) INFORMATION FOR SEQ ID NO:4157:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 80 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..80
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579710
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4157:

Ala Gly Asp Asp Asp Asp Asp Asp Asp Asp Glu Pro Pro Leu Asn 1 5 10 15

Glu Asp Asp Glu Glu Leu Asp Asp Leu Glu Glu Glu Glu Asp Glu
20
25
30

Pro You The Cle His Leu Vol Leu Ala Cle Pho Asp Lug Vol Sor Arg

Pro Xaa Thr Gln His Leu Val Leu Ala Gln Phe Asp Lys Val Ser Arg 35 40 45

Thr Lys Asn Arg Trp Lys Cys Thr Leu Lys Asp Gly Ile Met His Leu
50 55 60
Asn Gly Arg Asp Val Leu Phe Asp Lys Ala Thr Gly Glu Phe Asp Phe

Asn Gly Arg Asp Val Leu Phe Asn Lys Ala Thr Gly Glu Phe Asp Phe 65 70 75 80

- (2) INFORMATION FOR SEQ ID NO:4158:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 440 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..440
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579711
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4158:

aggactctag	gagaactggg	acgacagcag	cggcgggcga	cggggatgag	aaccctgtac	60
tgtatttcgt	cgacctttgc	catggcgtcg	tcgatgatga	gttctcgcgc	gggcgcggcg	120
gcggccggag	gaggagaaca	ccgccgtcag	cacgtcaccg	tggcgtgcgg	tgggctgacg	180
cggccgagta	ccaggcccgt	gccgggcgca	gctggcccac	ggcccgggac	gccgaggccg	240
cggggacctg	ctgcagctgc	gggcggctcc	tcgtcttcgt	cgccgacggg	gcgcgcgggg	300

ceggagtgca actggtgggg egetgeegeg eggeageagg egaegeegag geggtegagg 360 ageggeaggg eegegggege gegegtgeee aegggeaagg ggaacegega getggtgaga 420 egggegetea egeeggeeeg

- (2) INFORMATION FOR SEQ ID NO:4159:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 146 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..146
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579712
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4159:

Arg Thr Leu Gly Glu Leu Gly Arg Gln Gln Arg Arg Ala Thr Gly Met $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Arg Thr Leu Tyr Cys Ile Ser Ser Thr Phe Ala Met Ala Ser Ser Met 20 25 30

Met Ser Ser Arg Ala Gly Ala Ala Ala Gly Gly Glu His Arg 35 40 45

Arg Gln His Val Thr Val Ala Cys Gly Gly Leu Thr Arg Pro Ser Thr 50 55 60

Arg Pro Val Pro Gly Ala Ala Gly Pro Arg Pro Gly Thr Pro Arg Pro 65 70 75 80

Arg Gly Pro Ala Ala Ala Gly Gly Ser Ser Ser Ser Pro Thr
85 90 95

Gly Arg Ala Gly Pro Glu Cys Asn Trp Trp Gly Ala Ala Ala Arg Gln 100 105 110

Gln Ala Thr Pro Arg Arg Ser Arg Ser Gly Arg Ala Ala Gly Ala Arg 115 120 125

Val Pro Thr Gly Lys Gly Asn Arg Glu Leu Val Arg Arg Ala Leu Thr 130 140

Pro Ala

145

- (2) INFORMATION FOR SEQ ID NO:4160:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 146 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..146
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579713
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4160:

Asp Ser Arg Arg Thr Gly Thr Thr Ala Ala Ala Gly Asp Gly Asp Glu 1 5 10 15

Asn Pro Val Leu Tyr Phe Val Asp Leu Cys His Gly Val Val Asp Asp 20 25 30

Glu Phe Ser Arg Gly Arg Gly Gly Gly Arg Arg Arg Thr Pro Pro 35 40 45

Ser Ala Arg His Arg Gly Val Arg Trp Ala Asp Ala Ala Glu Tyr Gln 50 55 60

Ala Arg Ala Gly Arg Ser Trp Pro Thr Ala Arg Asp Ala Glu Ala Ala 65 70 75 80

Gly Thr Cys Cys Ser Cys Gly Arg Leu Leu Val Phe Val Ala Asp Gly 85 90 95

Ala Arg Gly Ala Gly Val Gln Leu Val Gly Arg Cys Arg Ala Ala Ala 100 105 110

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
Gly Asp Ala Glu Ala Val Glu Glu Arg Gln Gly Arg Gly Arg Ala Arg
                           120
Ala His Gly Gln Gly Glu Pro Arg Ala Gly Glu Thr Gly Ala His Ala
                                            140
   130
                        135
Gly Pro
145
(2) INFORMATION FOR SEQ ID NO:4161:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 131 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..131
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579714
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4161:
Met Arg Thr Leu Tyr Cys Ile Ser Ser Thr Phe Ala Met Ala Ser Ser
                                    10
Met Met Ser Ser Arg Ala Gly Ala Ala Ala Ala Gly Gly Glu His
            20
                                25
Arg Arg Gln His Val Thr Val Ala Cys Gly Gly Leu Thr Arg Pro Ser
                            40
Thr Arg Pro Val Pro Gly Ala Ala Gly Pro Arg Pro Gly Thr Pro Arg
                        55
Pro Arq Gly Pro Ala Ala Ala Gly Gly Ser Ser Ser Ser Pro
                                        75
                    70
Thr Gly Arg Ala Gly Pro Glu Cys Asn Trp Trp Gly Ala Ala Ala Arg
                85
                                    90
Gln Gln Ala Thr Pro Arg Arg Ser Arg Ser Gly Arg Ala Ala Gly Ala
            100
                                105
                                                    110
Arg Val Pro Thr Gly Lys Gly Asn Arg Glu Leu Val Arg Arg Ala Leu
                            120
                                                125
Thr Pro Ala
    130
(2) INFORMATION FOR SEQ ID NO:4162:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 434 base pairs
```

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..434
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579724
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4162:

ccaattagcc ttgtttaaga ccaacagaaa ggatagcatg tttgctgacc gggtatttga 60 120 cttqtttqac acqaaacaca atqqaattct cgagtttgag gaatttgctc gagccctttc tgtgttccat ccgagtgcac caatcgattt caaaattgat tttgctttca aattgtatga 180 tctcaaqcaa carggtttca ttgaaaagca ggaggtcaag caaatggtgg tcgcaacact 240 300 tgctgaayca ggaatgaatc tttcagatga tattattgaa ggcattattg ataagacatt 360 tqaqqaaqca qwatacaaag cacgwtggca aaattgataw ggaggattgg cgcagccttg tettgaggea tecatetetg ttaaaaaata tgaceeteee atateteegg gatateacea 420 caacwtttcm aagc

- (2) INFORMATION FOR SEQ ID NO:4163:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 111 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..111
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579725
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4163:
- Gln Leu Ala Leu Phe Lys Thr Asn Arg Lys Asp Ser Met Phe Ala Asp $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$
- Arg Val Phe Asp Leu Phe Asp Thr Lys His Asn Gly Ile Leu Glu Phe 20 25 30
- Glu Glu Phe Ala Arg Ala Leu Ser Val Phe His Pro Ser Ala Pro Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$
- Asp Phe Lys Ile Asp Phe Ala Phe Lys Leu Tyr Asp Leu Lys Gln Xaa 50 55
- Gly Phe Ile Glu Lys Gln Glu Val Lys Gln Met Val Val Ala Thr Leu 65 70 75 80
- Ala Glu Xaa Gly Met Asn Leu Ser Asp Asp Ile Ile Glu Gly Ile Ile 85 90 95
- Asp Lys Thr Phe Glu Glu Ala Xaa Tyr Lys Ala Xaa Trp Gln Asn 100 105 110
- (2) INFORMATION FOR SEQ ID NO:4164:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 99 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..99
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579726
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4164:
- Met Phe Ala Asp Arg Val Phe Asp Leu Phe Asp Thr Lys His Asn Gly
 1 5 10 15
- Ile Leu Glu Phe Glu Glu Phe Ala Arg Ala Leu Ser Val Phe His Pro 20 25 30
- Ser Ala Pro Ile Asp Phe Lys Ile Asp Phe Ala Phe Lys Leu Tyr Asp 35 40 45
- Leu Lys Gln Xaa Gly Phe Ile Glu Lys Gln Glu Val Lys Gln Met Val 50 55 60
- Val Ala Thr Leu Ala Glu Xaa Gly Met Asn Leu Ser Asp Asp Ile Ile 65 70 75 80
- Glu Gly Ile Ile Asp Lys Thr Phe Glu Glu Ala Xaa Tyr Lys Ala Xaa 85 90 95

Trp Gln Asn

- (2) INFORMATION FOR SEQ ID NO:4165:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..58
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579727
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4165:
- Met Glu Phe Ser Ser Leu Arg Asn Leu Leu Glu Pro Phe Leu Cys Ser

 1 5 10 15

Ile Arg Val His Gln Ser Ile Ser Lys Leu Ile Leu Leu Ser Asn Cys $20 \\ 25 \\ 30$

Met Ile Ser Ser Asn Xaa Val Ser Leu Lys Ser Arg Arg Ser Ser Lys 35 40 45

Trp Trp Ser Gln His Leu Leu Xaa Gln Glu 50 55

- (2) INFORMATION FOR SEQ ID NO:4166:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 516 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..516
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579756
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4166:

60 aaatggaggc ggaggcctcc accgacggag cagggcagga caggttgcat ttgcatctga 120 gttcctgatt gttgtatccc agtttcttct gtgagtggaa tcgcgaggaa gaaggatgtc gtgctgcgga ggcaactgcg ggtgcggcgc cggctgcaag tgcggcagcg gctgcggagg 180 qtqcaaqatq tacccggaca tggcagagca ggtgaccacc acccagactg tcatcatggg 240 300 tgttgcacca tccaagggcg ggttcgaggc ggccgccgga gctgagaatg gcgggtgcaa 360 qtgcqqcqcc aactqcacct qcgacccctg cacctgcaag tgagacgacg gcggcggcga 420 tgacqctqca qqqtctqcaq qccctqatqq qqtcqqaaqq actctttatc tctctagcta attaataaqc totaqctaqt atataatatt ctaqcaqtqt cqtttqctqt qttttqtycq 480 agtcagttag acagtcagcc gcgtgccatg ggccat

- (2) INFORMATION FOR SEQ ID NO:4167:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 75 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..75
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579757
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4167:

Met Ser Cys Cys Gly Gly Asn Cys Gly Cys Gly Ala Gly Cys Lys Cys
1 10 15

Val Thr Thr Gln Thr Val Ile Met Gly Val Ala Pro Ser Lys Gly 35 40 45

Gly Phe Glu Ala Ala Ala Gly Ala Glu Asn Gly Gly Cys Lys Cys Gly 50 55 60

Ala Asn Cys Thr Cys Asp Pro Cys Thr Cys Lys 65 70 75

- (2) INFORMATION FOR SEQ ID NO:4168:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..51
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579758
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4168:

Met Tyr Pro Asp Met Ala Glu Gln Val Thr Thr Thr Gln Thr Val Ile 10 Met Gly Val Ala Pro Ser Lys Gly Gly Phe Glu Ala Ala Ala Gly Ala 25 20 Glu Asn Gly Gly Cys Lys Cys Gly Ala Asn Cys Thr Cys Asp Pro Cys 40 Thr Cys Lys 50 (2) INFORMATION FOR SEQ ID NO:4169: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 47 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..47 (D) OTHER INFORMATION: / Ceres Seq. ID 1579759 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4169: Met Ala Glu Gln Val Thr Thr Gln Thr Val Ile Met Gly Val Ala 10 Pro Ser Lys Gly Gly Phe Glu Ala Ala Gly Ala Glu Asn Gly Gly 25 20 Cys Lys Cys Gly Ala Asn Cys Thr Cys Asp Pro Cys Thr Cys Lys 35 40 (2) INFORMATION FOR SEQ ID NO:4170: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 435 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..435 (D) OTHER INFORMATION: / Ceres Seq. ID 1579776 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4170: atctgattct gtgatcgaga tcgaggccga tcggccaggt ttcttgtgcg tgcgctctgc 60 120 tactgcatgg cggtagctca ccttcttctc caactctctg ccggagtcaa tggagctagc aggaacagga tgctcattcc agccattctt tcgattcttc agcttattca cctcgcagcg 180 ccggggagcg gcgggcagga cttctacgat gttagcctcg tcgacggctt caacgtgccg 240 300 gtgcgcgtgg cgccctcggg cggcggtggc gactgtcgtc ccgcggcgtg cgcgggcgac gtgaacgcga tgtgccccgc ggacctccgc gtcgtcgcct cgtccggcag cggcggcgtc 360 gtggcgtaca agagcgcgtg cagcgcctac ggcagcgcgc gctactgctg caccggccag 420 tacggcacgc cggag (2) INFORMATION FOR SEQ ID NO:4171: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 123 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4171:

Met Ala Val Ala His Leu Leu Gln Leu Ser Ala Gly Val Asn Gly

1 10 15

(B) LOCATION: 1..123

Ala Ser Arg Asn Arg Met Leu Ile Pro Ala Ile Leu Ser Ile Leu Gln

(D) OTHER INFORMATION: / Ceres Seq. ID 1579777

20 25 30

Leu Ile His Leu Ala Ala Pro Gly Ser Gly Gly Gln Asp Phe Tyr Asp
35 40 45

Val Ser Leu Val Asp Gly Phe Asn Val Pro Val Arg Val Ala Pro Ser 50 55 60

Gly Gly Gly Gly Asp Cys Arg Pro Ala Ala Cys Ala Gly Asp Val Asn 65 70 75 80

Ala Met Cys Pro Ala Asp Leu Arg Val Val Ala Ser Ser Gly Ser Gly 85 90 95

Gly Val Val Ala Tyr Lys Ser Ala Cys Ser Ala Tyr Gly Ser Ala Arg $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$

Tyr Cys Cys Thr Gly Gln Tyr Gly Thr Pro Glu 115 120

- (2) INFORMATION FOR SEQ ID NO:4172:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 64 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..64
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579778
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4172:

Met Glu Leu Ala Gly Thr Gly Cys Ser Phe Gln Pro Phe Phe Arg Phe 1 5 10 15

Phe Ser Leu Phe Thr Ser Gln Arg Gly Ala Ala Gly Arg Thr Ser 20 25 30

Thr Met Leu Ala Ser Ser Thr Ala Ser Thr Cys Arg Cys Ala Trp Arg 35 40 45

Pro Arg Ala Ala Val Ala Thr Val Val Pro Arg Arg Ala Arg Ala Thr 50 55 60

- (2) INFORMATION FOR SEQ ID NO:4173:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..102
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579779
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4173:

Met Leu Ile Pro Ala Ile Leu Ser Ile Leu Gln Leu Ile His Leu Ala 1 5 10 15

Ala Pro Gly Ser Gly Gly Gln Asp Phe Tyr Asp Val Ser Leu Val Asp 20 25 30

Gly Phe Asn Val Pro Val Arg Val Ala Pro Ser Gly Gly Gly Asp 35 40 45

Cys Arg Pro Ala Ala Cys Ala Gly Asp Val Asn Ala Met Cys Pro Ala 50 55 60

Asp Leu Arg Val Val Ala Ser Ser Gly Ser Gly Gly Val Val Ala Tyr 65 70 75 80

Lys Ser Ala Cys Ser Ala Tyr Gly Ser Ala Arg Tyr Cys Cys Thr Gly 85 90 95

Gln Tyr Gly Thr Pro Glu

- (2) INFORMATION FOR SEQ ID NO:4174:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 470 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..470
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579794
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4174:

- (2) INFORMATION FOR SEQ ID NO:4175:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..100
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579795
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4175:

Met Ala Lys Cys Ser Ser Lys Ile Arg Tyr Ile Val Trp Leu Arg Gln 1 5 10 15

Thr Leu Arg Arg Trp Arg Ser Arg Ala Ala Ala Arg Xaa Ala Val Pro 20 25 30

Ala Gly His Val Ala Val Cys Val Gly Gly Ala Ala Arg Arg Phe Val 35 40 45

Val Arg Ala Ala His Leu Asn His Pro Val Phe Arg Glu Leu Leu Arg 50 55 60

Gln Ala Glu Glu Glu Tyr Gly Phe Pro Ser Gly Ala Cys Ala Gly Pro
65 70 75 80

Ile Ala Leu Pro Cys Asp Glu Gly Leu Phe Glu His Val Leu Gly His 85 90 95

Leu Ser Ser Pro

100

- (2) INFORMATION FOR SEQ ID NO:4176:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 97 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..97
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579796
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4176:

Met Gln Gln Asp Pro Val His Arg Val Ala Ala Ala Asp Ala Ala 1 5 10 15

Ala Val Ala Val Pro Arg Gly Gly Ser Xaa Gly Gly Pro Gly Gly Pro

Arg Gly Gly Val Arg Gly Arg Arg Gly Ala Ala Val Arg Gly Ala Gly Gly Ala Gly Ala Gly Ala Gly Ala Pro Glu Pro Pro Arg Val Pro Gly Ala Ala Pro Ala Gly Gly 50

Gly Gly Val Arg Val Pro Val Gly Gly Leu Arg Gly Pro His Arg Ala 65

Pro Leu Arg Arg Gly Pro Leu Arg Ala Arg Pro Arg Pro Pro Leu Leu 85

Pro

_ -

- (2) INFORMATION FOR SEQ ID NO:4177:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 471 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..471
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579801
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4177:

ggettggteg cagttegtgg eggatgget gttettegeg gagetgaatg agatgetgae 60 cegegagete geggaggatg getacteegg egtegaggte egegteacee eeatgegeae 120 cgagateate atcegtgea eeegeactea gaacgttete ggegagaagg geeggaggat 180 cagggagetg acttetgtgg tteagaageg etteaactte eeggagggtg gtgttgaget 240 ctacgeagag aaggtgaaca acegtggeet etgegeeatt geeeaggeeg agtegeteeg 300 ctacaagett ettggtggae tageegtgag aagggeatgt tatggtgtte teaggtttgt 360 catggagagt ggtgetaagg getgtgaggt tattgtaagt ggeaagetea gggeteageg 420 agetaagtet atgaagttea aggatggta catgattet teetggteatb e

- (2) INFORMATION FOR SEQ ID NO:4178:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 156 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..156
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579802
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4178:

Ala Trp Ser Gln Phe Val Ala Asp Gly Val Phe Phe Ala Glu Leu Asn 1 5 10 15

Glu Met Leu Thr Arg Glu Leu Ala Glu Asp Gly Tyr Ser Gly Val Glu
20 25 30

Val Arg Val Thr Pro Met Arg Thr Glu Ile Ile Ile Arg Ala Thr Arg 35 40 45

Thr Gln Asn Val Leu Gly Glu Lys Gly Arg Arg Ile Arg Glu Leu Thr 50 55 60

Ser Val Val Gln Lys Arg Phe Asn Phe Pro Glu Gly Gly Val Glu Leu
70 75 80

Tyr Ala Glu Lys Val Asn Asn Arg Gly Leu Cys Ala Ile Ala Gln Ala 85 90 95

Glu Ser Leu Arg Tyr Lys Leu Leu Gly Gly Leu Ala Val Arg Arg Ala
100 105 110

Cys Tyr Gly Val Leu Arg Phe Val Met Glu Ser Gly Ala Lys Gly Cys 115 120 125

Glu Val Ile Val Ser Gly Lys Leu Arg Ala Gln Arg Ala Lys Ser Met 130 135 140 Lys Phe Lys Asp Gly Tyr Met Ile Ser Ser Gly His 145 150 155 (2) INFORMATION FOR SEQ ID NO:4179:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 139 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..139
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579803
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4179:

Met Leu Thr Arg Glu Leu Ala Glu Asp Gly Tyr Ser Gly Val Glu Val
1 5 10 15

Arg Val Thr Pro Met Arg Thr Glu Ile Ile Ile Arg Ala Thr Arg Thr 20 25 30

Gln Asn Val Leu Gly Glu Lys Gly Arg Arg Ile Arg Glu Leu Thr Ser 35 40 45

Val Val Gln Lys Arg Phe Asn Phe Pro Glu Gly Gly Val Glu Leu Tyr 50 55 60

Ala Glu Lys Val Asn Asn Arg Gly Leu Cys Ala Ile Ala Gln Ala Glu 65 70 75 80

Ser Leu Arg Tyr Lys Leu Leu Gly Gly Leu Ala Val Arg Arg Ala Cys 85 90 95

Tyr Gly Val Leu Arg Phe Val Met Glu Ser Gly Ala Lys Gly Cys Glu 100 105 110

Val Ile Val Ser Gly Lys Leu Arg Ala Gln Arg Ala Lys Ser Met Lys 115 120 125

Phe Lys Asp Gly Tyr Met Ile Ser Ser Gly His 130

- (2) INFORMATION FOR SEQ ID NO:4180:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 119 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..119
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579804
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4180:

Met Arg Thr Glu Ile Ile Ile Arg Ala Thr Arg Thr Gln Asn Val Leu 1 5 10 15

Gly Glu Lys Gly Arg Arg Ile Arg Glu Leu Thr Ser Val Val Gln Lys
20 25 30

Arg Phe Asn Phe Pro Glu Gly Gly Val Glu Leu Tyr Ala Glu Lys Val
35 40 45

Asn Asn Arg Gly Leu Cys Ala Ile Ala Gln Ala Glu Ser Leu Arg Tyr 50 55 60

Lys Leu Gly Gly Leu Ala Val Arg Arg Ala Cys Tyr Gly Val Leu 65 70 75 80

Arg Phe Val Met Glu Ser Gly Ala Lys Gly Cys Glu Val Ile Val Ser 85 90 95

Gly Lys Leu Arg Ala Gln Arg Ala Lys Ser Met Lys Phe Lys Asp Gly
100 105 110

Tyr Met Ile Ser Ser Gly His

(2) INFORMATION FOR SEQ ID NO:4181:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 529 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..529
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579820
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4181:

agggagagac	cctttccatc	caagctagcc	aaaccctagc	caccgtcggt	tccaatctgc	60
caacatctcg	tccgctggtg	ggtggctcgg	cctcggcggc	atggcctcgt	ccgcctacgc	120
ttgggacgcc	gcggaggagg	cggacatcga	cgcctccgca	tcgcaggagg	agctcatcgt	180
		gtgacaatga				240
ggaggaggag	gaggaggagg	tcgaggtgtt	cagcacgccg	cctctcacgc	atcaggaccc	300
		tcatcgccat				360
		ctccctcccc				420
		ggaagaaggt				480
		agatcaggtc				

- (2) INFORMATION FOR SEQ ID NO:4182:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 143 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..143
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579821
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4182:

Gly Glu Thr Leu Ser Ile Gln Ala Ser Gln Thr Leu Ala Thr Val Gly 1 5 10 15 Ser Asn Leu Pro Thr Ser Arg Pro Leu Val Gly Gly Ser Ala Ser Ala

20 25 30

Ala Trp Pro Arg Pro Pro Thr Leu Gly Thr Pro Arg Arg Arg Thr 35 40 45

Ser Thr Pro Pro His Arg Arg Arg Ser Ser Ser Ser Ala Pro Ala Ser 50 55 60
Ser Pro Val Thr Met Arg Arg Arg Gly Arg Gly Arg Gly Arg Gly Arg

65 70 75 80
Arg Arg Arg Arg Arg Ser Arg Cys Ser Ala Arg Arg Leu Ser Arg

85 90 95

Ile Arg Thr Arg Arg Val Arg Gly Lys Lys Ser Ser Pro Cys Ala Pro

100 105 110 Ser Pro Ser Pro Ser Leu Thr Pro Arg Leu Leu Pro Leu Xaa Leu Pro

115 120 125
Pro Leu Pro Arg Thr Val Arg Val Ala Val Arg Ser Gly Ser Asn
130 135 140

- (2) INFORMATION FOR SEQ ID NO:4183:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..125
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579822

```
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4183:
Met Ala Ser Ser Ala Tyr Ala Trp Asp Ala Ala Glu Glu Ala Asp Ile
                                    10
Asp Ala Ser Ala Ser Gln Glu Glu Leu Ile Val Arg Ala Arg Phe Ile
Ser Arg Asp Asn Glu Glu Glu Gly Glu Gly Glu Gly Glu Gly Glu Glu Glu
                            4.0
Glu Glu Glu Glu Val Glu Val Phe Ser Thr Pro Pro Leu Thr His
                        55
Gln Asp Pro Gln Ser Pro Gly Glu Glu Val Ile Ala Met Cys Ser Ile
                                        75
                    70
Pro Phe Thr Gln Pro Asp Pro Thr Pro Pro Pro Ala Xaa Ala Pro Ser
                                    90
                85
Pro Pro Ser Asp Ser Lys Ser Arg Arg Pro Glu Arg Val Lys Leu Lys
                                105
            100
Pro Arg Lys Lys Val Cys Lys Arg Lys Glu Cys Leu Gln
        115
                           120
(2) INFORMATION FOR SEQ ID NO:4184:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 75 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..75
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579823
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4184:
Met Arg Arg Gly Arg Gly Arg Gly Arg Gly Arg Arg Arg Arg Arg
Arg Arg Ser Arg Cys Ser Ala Arg Arg Leu Ser Arg Ile Arg Thr Arg
                                25
            20
Arg Val Arg Gly Lys Lys Ser Ser Pro Cys Ala Pro Ser Pro Ser Pro
                            40
Ser Leu Thr Pro Arg Leu Leu Pro Leu Xaa Leu Pro Pro Leu Pro Arg
                        55
Thr Val Arg Val Ala Val Arg Ser Gly Ser Asn
                    70
(2) INFORMATION FOR SEQ ID NO:4185:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 437 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..437
          (D) OTHER INFORMATION: / Ceres Seq. ID 1579828
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4185:
aaggtccaga agcccagaac cagacgagca cggacggatc tcccccaacg cgcgtgcqtc
cqcaactagc gtctgccgcc ggcgccttct tccgcacccc ccgacgcggc aaggagcccc
ccgccatgag ggtccacccg gccccgcgga agcgcaccat cgccgtgcaa cgctgcgcct
                                                                       180
ccgcggcggc gggcgcgctc ggcgggaaga agctgcgccg cctgccgcac atattcgaca
                                                                       240
aggtgctgga gctcccgttc gcggccgacg cggacgtgtc cgtcgaggag gacgcggcgg
                                                                       300
cgctgcggtt cgtcgccgcc gccgacgagt tctccctcgc gggcgcccgc gcgcacgccg
                                                                       360
```

gcggcgatgg cgacgac
(2) INFORMATION FOR SEQ ID NO:4186:

(i) SEQUENCE CHARACTERISTICS:

tegagateca eccaggggte accaaggteg tegteegegg ceteteetee tecteeeteg

- (A) LENGTH: 145 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..145
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579829
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4186:

Arg Ser Arg Ser Pro Glu Pro Asp Glu His Gly Arg Ile Ser Pro Asn 1 5 10 15

Ala Arg Ala Ser Ala Thr Ser Val Cys Arg Arg Arg Leu Leu Pro His 20 25 30

Pro Pro Thr Arg Gln Gly Ala Pro Arg His Glu Gly Pro Pro Gly Pro 35 40 45

Ala Glu Ala His His Arg Arg Ala Thr Leu Arg Leu Arg Gly Gly 50 55 60

Arg Ala Arg Arg Glu Glu Ala Ala Pro Pro Ala Ala His Ile Arg Gln 65 70 75 80

Gly Ala Gly Ala Pro Val Arg Gly Arg Gly Arg Val Arg Gly
85
90
95

Gly Arg Gly Gly Ala Ala Val Arg Arg Arg Arg Arg Arg Val Leu Pro $100 \hspace{1.5cm} 105 \hspace{1.5cm} 105$

Arg Gly Arg Pro Arg Ala Arg Arg Arg Asp Pro Pro Arg Gly His Gln
115 120 125

Gly Arg Arg Pro Arg Pro Leu Leu Leu Pro Arg Arg Arg Trp Arg 130 135 140

Arg

- (2) INFORMATION FOR SEQ ID NO:4187:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 145 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..145
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579830
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4187:

Gly Pro Glu Ala Gln Asn Gln Thr Ser Thr Asp Gly Ser Pro Pro Thr 1 5 10 15

Arg Val Arg Pro Gln Leu Ala Ser Ala Ala Gly Ala Phe Phe Arg Thr

Pro Arg Arg Gly Lys Glu Pro Pro Ala Met Arg Val His Pro Ala Pro 35 40 45

Arg Lys Arg Thr Ile Ala Val Gln Arg Cys Ala Ser Ala Ala Ala Gly 50 55 60

Ala Leu Gly Gly Lys Lys Leu Arg Arg Leu Pro His Ile Phe Asp Lys 65 70 75 80

Val Leu Glu Leu Pro Phe Ala Ala Asp Ala Asp Val Ser Val Glu Glu
85 90 95

Asp Ala Ala Leu Arg Phe Val Ala Ala Ala Asp Glu Phe Ser Leu 100 105 110

Ala Gly Ala Arg Ala His Ala Val Glu Ile His Pro Gly Val Thr Lys 115 120 125

Val Val Val Arg Gly Leu Ser Ser Ser Ser Leu Gly Gly Asp Gly Asp 130 135 140

Asp

145 (2) INFORMATION FOR SEQ ID NO:4188: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 104 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..104 (D) OTHER INFORMATION: / Ceres Seq. ID 1579831 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4188: Met Arg Val His Pro Ala Pro Arg Lys Arg Thr Ile Ala Val Gln Arg 10 Cys Ala Ser Ala Ala Ala Gly Ala Leu Gly Gly Lys Lys Leu Arg Arg 20 25 Leu Pro His Ile Phe Asp Lys Val Leu Glu Leu Pro Phe Ala Ala Asp 40 Ala Asp Val Ser Val Glu Glu Asp Ala Ala Leu Arg Phe Val Ala 55 Ala Ala Asp Glu Phe Ser Leu Ala Gly Ala Arg Ala His Ala Val Glu 70 75 Ile His Pro Gly Val Thr Lys Val Val Val Arg Gly Leu Ser Ser Ser 90 85 Ser Leu Gly Gly Asp Gly Asp Asp 100 (2) INFORMATION FOR SEQ ID NO:4189: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 425 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..425 (D) OTHER INFORMATION: / Ceres Seq. ID 1579836 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4189: attectette caqetecaqe tatttecace qeacattgte caegtetgee attggeecat 60 tgccggttcc tctcgtcaag ccctagctcc aaccaacccg tttccatggg agccatacga 120 gttgcaagcc ttctactcct cgctggggta atctggctgt cgcgggcgat gttcggcgcg 180 gaggeegeeg geaegaeggt gtteaegetg cacaacaact geaeceacae ggtetggeeg 240 gccacactgt ccgggaacag cgcggcggcc gtcgggggcg ggggcttcga gctgtcgcc 300 360 ggcgccaccg tctcgttccc ggcgccggcg ggctggtcgg gccgcctgtg ggcgcgcacg ggetgegteg egtegtegte gteeceegee ggeegeetet egtgegeaeg ggegaetgea 420 gcggc (2) INFORMATION FOR SEQ ID NO:4190: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 141 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE:

(A) NAME/KEY: peptide (B) LOCATION: 1..141

(D) OTHER INFORMATION: / Ceres Seq. ID 1579837

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4190:

Ile Pro Leu Pro Ala Pro Ala Ile Ser Thr Ala His Cys Pro Arg Leu 1 5 10 15 Pro Leu Ala His Cys Arg Phe Leu Ser Ser Ser Pro Ser Ser Asn Gln 20 25 30

Pro Val Ser Met Gly Ala Ile Arg Val Ala Ser Leu Leu Leu Ala 35 40 45

Gly Val Ile Trp Leu Ser Arg Ala Met Phe Gly Ala Glu Ala Ala Gly 50 55 60

Thr Thr Val Phe Thr Leu His Asn Asn Cys Thr His Thr Val Trp Pro 75 80

Ala Thr Leu Ser Gly As
n Ser Ala Ala Ala Val Gly Gly Gly Phe\$85\$90 95

Glu Leu Ser Pro Gly Ala Thr Val Ser Phe Pro Ala Pro Ala Gly Trp \$100\$

Ser Gly Arg Leu Trp Ala Arg Thr Gly Cys Val Ala Ser Ser Ser Ser 115 120 125

Pro Ala Gly Arg Leu Ser Cys Ala Arg Ala Thr Ala Ala 130 135 140

- (2) INFORMATION FOR SEQ ID NO:4191:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 106 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..106
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579838
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4191:

Met Gly Ala Ile Arg Val Ala Ser Leu Leu Leu Leu Ala Gly Val Ile 1 5 10 15

Trp Leu Ser Arg Ala Met Phe Gly Ala Glu Ala Ala Gly Thr Thr Val 20 25 30

Phe Thr Leu His Asn Asn Cys Thr His Thr Val Trp Pro Ala Thr Leu 35 40 45

Ser Gly Asn Ser Ala Ala Ala Val Gly Gly Gly Phe Glu Leu Ser 50 55 60

Pro Gly Ala Thr Val Ser Phe Pro Ala Pro Ala Gly Trp Ser Gly Arg
65 70 75 80

Leu Trp Ala Arg Thr Gly Cys Val Ala Ser Ser Ser Ser Pro Ala Gly 85 90 95

Arg Leu Ser Cys Ala Arg Ala Thr Ala Ala 100 105

- (2) INFORMATION FOR SEQ ID NO:4192:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 85 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..85
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579839
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4192:

Met Phe Gly Ala Glu Ala Ala Gly Thr Thr Val Phe Thr Leu His Asn 1 $$ 5 $$ 10

Asn Cys Thr His Thr Val Trp Pro Ala Thr Leu Ser Gly Asn Ser Ala 20 25 30

Ala Ala Val Gly Gly Gly Phe Glu Leu Ser Pro Gly Ala Thr Val 35 40 45

Ser Phe Pro Ala Pro Ala Gly Trp Ser Gly Arg Leu Trp Ala Arg Thr

Gly Cys Val Ala Ser Ser Ser Pro Ala Gly Arg Leu Ser Cys Ala 75 65 Arg Ala Thr Ala Ala 85

- (2) INFORMATION FOR SEQ ID NO:4193:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..406
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579865
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4193:

aacaaatagt agccatggcg atgatggcgt tggctattgg gtccgatcag atatctactc 60 aaqctaqqaq qqacaqtatc attaqtqqac tgaacaacct ttcaagcaat gtcagcgaag 120 ttctcaaqct agatqctqqa atqaaqqaqc tcqcctcttc gctgatcgac tcagagtcgc 180 tecteqtqtt eggaaggggt tacaactacq ceaeegeget qqaqqeqee etqaaqqtea 240 aggaggtggc gctgatgcac agcgaaggca tgctcgctgg cgagatgaag cacggaccgc 300 tggccctcgt ggacgagaac ctccccatca ttgtcattgc gactcgcgac gcgtgcttca 360 gcaagcagca gtcggtgatc cagcagctcc tctcgcgtag ggggcg

- (2) INFORMATION FOR SEQ ID NO:4194:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 134 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..134
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579866
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4194:

Gln Ile Val Ala Met Ala Met Ala Leu Ala Ile Gly Ser Asp Gln 10

Ile Ser Thr Gln Ala Arg Arg Asp Ser Ile Ile Ser Gly Leu Asn Asn 25 20

Leu Ser Ser Asn Val Ser Glu Val Leu Lys Leu Asp Ala Gly Met Lys 40 45

Glu Leu Ala Ser Ser Leu Ile Asp Ser Glu Ser Leu Leu Val Phe Gly 55 60

Arg Gly Tyr Asn Tyr Ala Thr Ala Leu Glu Gly Ala Leu Lys Val Lys 75 70

Glu Val Ala Leu Met His Ser Glu Gly Met Leu Ala Gly Glu Met Lys 90 85

His Gly Pro Leu Ala Leu Val Asp Glu Asn Leu Pro Ile Ile Val Ile 105 110 100

Ala Thr Arg Asp Ala Cys Phe Ser Lys Gln Gln Ser Val Ile Gln Gln 120 115

Leu Leu Ser Arg Arg Gly 130

- (2) INFORMATION FOR SEQ ID NO:4195:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 130 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..130
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579867
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4195:
- Met Ala Met Met Ala Leu Ala Ile Gly Ser Asp Gln Ile Ser Thr Gln 1 5 10 15
- Ala Arg Arg Asp Ser Ile Ile Ser Gly Leu Asn Asn Leu Ser Ser Asn 20 25 30
- Val Ser Glu Val Leu Lys Leu Asp Ala Gly Met Lys Glu Leu Ala Ser 35 40 45
- Ser Leu Ile Asp Ser Glu Ser Leu Leu Val Phe Gly Arg Gly Tyr Asn 50 55 60
- Tyr Ala Thr Ala Leu Glu Gly Ala Leu Lys Val Lys Glu Val Ala Leu 65 70 75 80
- Met His Ser Glu Gly Met Leu Ala Gly Glu Met Lys His Gly Pro Leu 85 90 95
- Ala Leu Val Asp Glu Asn Leu Pro Ile Ile Val Ile Ala Thr Arg Asp 100 105 110
- Ala Cys Phe Ser Lys Gln Gln Ser Val Ile Gln Gln Leu Leu Ser Arg 115 120 125

Arg Gly 130

- (2) INFORMATION FOR SEQ ID NO:4196:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 128 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..128
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579868
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4196:
- Met Met Ala Leu Ala Ile Gly Ser Asp Gln Ile Ser Thr Gln Ala Arg
 1 5 10 15
- Arg Asp Ser Ile Ile Ser Gly Leu Asn Asn Leu Ser Ser Asn Val Ser 20 25 30
- Glu Val Leu Lys Leu Asp Ala Gly Met Lys Glu Leu Ala Ser Ser Leu 35 40 45
- Ile Asp Ser Glu Ser Leu Leu Val Phe Gly Arg Gly Tyr Asn Tyr Ala
 50 55 60
- Thr Ala Leu Glu Gly Ala Leu Lys Val Lys Glu Val Ala Leu Met His 70 75 80
- Ser Glu Gly Met Leu Ala Gly Glu Met Lys His Gly Pro Leu Ala Leu 85 90 95
- Val Asp Glu Asn Leu Pro Ile Ile Val Ile Ala Thr Arg Asp Ala Cys 100 105 110
- Phe Ser Lys Gln Gln Ser Val Ile Gln Gln Leu Leu Ser Arg Arg Gly
 115 120 125
- (2) INFORMATION FOR SEQ ID NO:4197:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 489 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..489
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579873
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4197:

aaggccaggg	atgacgaagg	acaagagaag	aaaaagccaa	agaagaaaaa	agatccgaat	60
gctccgaaac	gagccatgac	cccgttcatg	tatttctcaa	tggctgagcg	aggaaacatg	120
aagagcagca	acccagattt	gcctacgact	gagatcgcaa	agaagcttgg	ggagatgtgg	180
caaaagatgt	caggcgaaga	gaaacagcct	tacatccagc	aggcccaggt	cgacaagaaa	240
cgttatgaaa	aagaatccgc	tgtctatcgc	ggtgaagcta	cagtcgatgt	ggattctggg	300
aacgagtctg	actagagatc	caagctcttg	ggctggcatg	gtggcacggg	atgaaagtct	360
agtgccatgt	gtgctattgt	tatgtcagca	actgttgcca	acaacattgc	tgacagtaaa	420
gagagtttct	ctcgcagcgt	acctctgcag	ggcaaaagaa	tgtacgagtg	tagtctagtg	480
attttgtgt						

- (2) INFORMATION FOR SEQ ID NO:4198:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 104 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..104
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579874
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4198:
- Lys Ala Arg Asp Glu Gly Gln Glu Lys Lys Lys Pro Lys Lys 1 5 10 15
- Lys Asp Pro Asn Ala Pro Lys Arg Ala Met Thr Pro Phe Met Tyr Phe 20 25 30
- Ser Met Ala Glu Arg Gly Asn Met Lys Ser Ser Asn Pro Asp Leu Pro 35 40 45
- Thr Thr Glu Ile Ala Lys Lys Leu Gly Glu Met Trp Gln Lys Met Ser 50 55 60
- Gly Glu Glu Lys Gln Pro Tyr Ile Gln Gln Ala Gln Val Asp Lys 65 70 75 80
- Arg Tyr Glu Lys Glu Ser Ala Val Tyr Arg Gly Glu Ala Thr Val Asp \$90\$
- Val Asp Ser Gly Asn Glu Ser Asp 100
- (2) INFORMATION FOR SEQ ID NO:4199:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 79 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..79
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579875
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4199:
- Met Thr Pro Phe Met Tyr Phe Ser Met Ala Glu Arg Gly Asn Met Lys
 1 10 15
- Ser Ser Asn Pro Asp Leu Pro Thr Thr Glu Ile Ala Lys Lys Leu Gly 20 25 30
- Glu Met Trp Gln Lys Met Ser Gly Glu Glu Lys Gln Pro Tyr Ile Gln 35 40 45
- Gln Ala Gln Val Asp Lys Lys Arg Tyr Glu Lys Glu Ser Ala Val Tyr 50 55 60
- Arg Gly Glu Ala Thr Val Asp Val Asp Ser Gly Asn Glu Ser Asp 65 70 75

(2) INFORMATION FOR SEQ ID NO: 4200: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 77 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..77 (D) OTHER INFORMATION: / Ceres Seq. ID 1579876 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4200: Met Lys Lys Asn Pro Leu Ser Ile Ala Val Lys Leu Gln Ser Met Trp 10 Ile Leu Gly Thr Ser Leu Thr Arg Asp Pro Ser Ser Trp Ala Gly Met 2.0 25 Val Ala Arg Asp Glu Ser Leu Val Pro Cys Val Leu Leu Cys Gln 40 Gln Leu Leu Pro Thr Thr Leu Leu Thr Val Lys Arg Val Ser Leu Ala 55 Ala Tyr Leu Cys Arg Ala Lys Glu Cys Thr Ser Val Val 70 75 (2) INFORMATION FOR SEQ ID NO: 4201: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 356 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..356 (D) OTHER INFORMATION: / Ceres Seq. ID 1579877 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4201: attattagga agaacactgt tttgtctccg gcccgtcgca gccccactgc cgtgcgcgcc 60 accetgeegg egeaceegge eeegeeageg egttegagge egacgegege egecacetge 120 egegteacge teeggeeatt cetgececet caccattetg eegectecac egeageagee 180 geggegatge gaccegeate etectectee egettetegg ceacaacate teegtetege 240 300 tgccgacctg aacaacgagg cacactccat tgttggccat gcttgatctc ctcatcctgc tgcagtqctq ccqtqqaaqq qaqqccaqtq cqqqaacaac ccaqactqcq aqcqcc (2) INFORMATION FOR SEQ ID NO:4202: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 118 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..118 (D) OTHER INFORMATION: / Ceres Seq. ID 1579878 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4202: Ile Ile Arg Lys Asn Thr Val Leu Ser Pro Ala Arg Arg Ser Pro Thr 10 Ala Val Arg Ala Thr Leu Pro Ala His Pro Ala Pro Pro Ala Arg Ser 25 Arg Pro Thr Arg Ala Ala Thr Cys Arg Val Thr Leu Arg Pro Phe Leu

35 40 45 Pro Pro His His Ser Ala Ala Ser Thr Ala Ala Ala Ala Ala Met Arg

Pro Ala Ser Ser Ser Ser Arg Phe Ser Ala Thr Thr Ser Pro Ser Arg

55

Attorney Docket No. 2750-1235P 65 70 75 80 Cys Arg Pro Glu Gln Arg Gly Thr Leu His Cys Trp Pro Cys Leu Ile 90 Ser Ser Ser Cys Cys Ser Ala Ala Val Glu Gly Arg Pro Val Arg Glu 100 105 Gln Pro Arg Leu Arg Ala 115 (2) INFORMATION FOR SEQ ID NO:4203: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 94 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..94 (D) OTHER INFORMATION: / Ceres Seq. ID 1579879 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4203: Leu Leu Gly Arg Thr Leu Phe Cys Leu Arg Pro Val Ala Ala Pro Leu 10 Pro Cys Ala Pro Pro Cys Arg Arg Thr Arg Pro Arg Gln Arg Val Arg 25 Gly Arg Arg Ala Pro Pro Pro Ala Ala Ser Arg Ser Gly His Ser Cys Pro Leu Thr Ile Leu Pro Pro Pro Pro Gln Gln Pro Arg Arg Cys Asp Pro His Pro Pro Pro Pro Ala Ser Arg Pro Gln His Leu Arg Leu Ala 70 Ala Asp Leu Asn Asn Glu Ala His Ser Ile Val Gly His Ala 85 (2) INFORMATION FOR SEQ ID NO: 4204: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 476 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..476 (D) OTHER INFORMATION: / Ceres Seq. ID 1579904 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4204:

taattqtcat tqctqcaacq aactttcctq aqtcqctaqa taaaqcccta gtcagacctg ggcgttttga ccgtcatatt gttgttccca acccagatgt tgaaggtcga cgccaaattc 120 tagaatgccc atatgtcaaa gatcttgaaa ggtgatgatg tggacttaat gatcattgct 180 agaggaacac cgggattctc tggtgcagac cttgctaact tggtaaatgt tgctgctctt 240 aaqqctqcca tggatggtgc aaaagctgtc acaatggatg atcttgagta tgcaaaggac 300 cqaatcatga tgggtagtga gcggaagtcg gcagttatct ctgacgaatg caggaagctg 360 acaqcatacc atgagggagg gcatgccctt gttgcaatcc acacagaagg agctcaccct 420 gtccacaagg ctaccatcgt acctaggggg atggccctag gaatggtggc ccaact

- (2) INFORMATION FOR SEQ ID NO: 4205:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 114 amino acids (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..114

(D) OTHER INFORMATION: / Ceres Seq. ID 1579905

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4205:

Met Ser Lys Ile Leu Lys Gly Asp Asp Val Asp Leu Met Ile Ile Ala 1 5 10 15

Arg Gly Thr Pro Gly Phe Ser Gly Ala Asp Leu Ala Asn Leu Val Asn 20 25 30

Val Ala Ala Leu Lys Ala Ala Met Asp Gly Ala Lys Ala Val Thr Met $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Asp Asp Leu Glu Tyr Ala Lys Asp Arg Ile Met Met Gly Ser Glu Arg 50 55 60

Lys Ser Ala Val Ile Ser Asp Glu Cys Arg Lys Leu Thr Ala Tyr His 65 70 75 80

Glu Gly Gly His Ala Leu Val Ala Ile His Thr Glu Gly Ala His Pro 85 90 95

Val His Lys Ala Thr Ile Val Pro Arg Gly Met Ala Leu Gly Met Val 100 105 110

Ala Gln

- (2) INFORMATION FOR SEQ ID NO: 4206:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..102
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579906
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4206:

Met Ile Ile Ala Arg Gly Thr Pro Gly Phe Ser Gly Ala Asp Leu Ala 1 5 10 15

Asn Leu Val Asn Val Ala Ala Leu Lys Ala Ala Met Asp Gly Ala Lys 20 25 30

Ala Val Thr Met Asp Asp Leu Glu Tyr Ala Lys Asp Arg Ile Met Met 35 45

Gly Ser Glu Arg Lys Ser Ala Val Ile Ser Asp Glu Cys Arg Lys Leu 50 55 60

Thr Ala Tyr His Glu Gly Gly His Ala Leu Val Ala Ile His Thr Glu 65 70 75 80

Gly Ala His Pro Val His Lys Ala Thr Ile Val Pro Arg Gly Met Ala 85 90 95

Leu Gly Met Val Ala Gln

100

- (2) INFORMATION FOR SEQ ID NO:4207:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 75 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..75
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579907
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4207:

Met Asp Gly Ala Lys Ala Val Thr Met Asp Asp Leu Glu Tyr Ala Lys 1 5 10 15

Asp Arg Ile Met Met Gly Ser Glu Arg Lys Ser Ala Val Ile Ser Asp
20 25 30

Glu Cys Arg Lys Leu Thr Ala Tyr His Glu Gly Gly His Ala Leu Val

35 40 45

Ala Ile His Thr Glu Gly Ala His Pro Val His Lys Ala Thr Ile Val
50 55 60

Pro Arg Gly Met Ala Leu Gly Met Val Ala Gln

Pro Arg Gly Met Ala Leu Gly Met Val Ala Gln
65 70 75

- (2) INFORMATION FOR SEQ ID NO: 4208:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 439 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..439
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579911
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4208:

aaaccgattt ccccttttt tetttatttt ettegteete ttegtetega etegeegeee agteacetea aatecetteg atecaatete caaacyetag geaatecaae ateaaagtat 120 tagetgeee ettegteaaa eegeggegge geggeeatgg eecaeggegg eggegeeggg 180 aaggegaagg tgaegeegga eectggeggt gaeggegagg geaegegeae geteaaeege 240 aetgtgetge agegeetega eecggeegtt gaggatatte teateaeege ggeteaegte aegetgtaeg actttgaeae egatgteaae eagtggagae ggaaggaegt ggaggggteg 360 etettegteg teaagaggaa tgeteaaeet agatteeagt teatggteat gaaccgcagg 420 aatacagata atetagttg

- (2) INFORMATION FOR SEQ ID NO: 4209:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 89 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..89
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579912
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4209:

Thr Asp Phe Pro Leu Phe Ser Leu Phe Ser Ser Ser Ser Ser Ser Arg

1 10 15

Leu Ala Ala Gln Ser Pro Gln Ile Pro Ser Ile Gln Ser Pro Asn Xaa 20 25 30

Arg Gln Ser Asn Ile Lys Val Leu Ala Ala Pro Phe Val Lys Pro Arg 35 40 45

Arg Arg Gly His Gly Pro Arg Arg Arg Arg Glu Gly Glu Gly Asp 50 55 60

Ala Glu Pro Gly Gly Gly Arg Arg Gly His Ala His Ala Gln Pro His 65 70 75 80

Cys Ala Ala Ala Pro Arg Pro Gly Arg

- (2) INFORMATION FOR SEQ ID NO:4210:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 94 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..94
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579913
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4210:

- (2) INFORMATION FOR SEQ ID NO: 4211:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 496 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..496
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579922
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4211:

aaggccctct gtctgtgte gagcgcaaga gaaagggagt cagagagaa gagagagga 60 ggagaccttg cagaggageg aagcaagcaa ggtgggaaag aagcagcage aagggggeg 120 ggctgccgga aggggaacat gctccctcct catctcacag agaatggcge ggtgatgatt 180 cagtttggce atcagatgce tgattacgae tccccggcta cccagtcaac cagtgagacg 240 agccatcaag aagcgtctgg aatgagcgaa gggagcctca acgagcataa taatgaccat 300 ctgggcaacc ttgatgggta ctcgaagagt gacgaaaaca agatgatgte agcgttatcc ctgggcaatc cggaaacage ttacgcacat aatccgaage ctgaccgtae tcagtcctte 420 gccatatcat acccatatge cgatccatac tacggtggeg cggtggcage agcttatggc 480 ccgcatgcta tcatgc

- (2) INFORMATION FOR SEQ ID NO: 4212:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 165 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..165
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579923
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4212:

Lys Ala Leu Cys Leu Cys Ala Ser Ala Arg Glu Arg Glu Ser Glu Arg

1 10 15

Glu Arg Glu Gly Gly Asp Leu Ala Glu Glu Arg Ser Lys Gln Gly Gly
20
25
30

Lys Glu Ala Ala Arg Ala Ala Gly Cys Arg Lys Gly Asn Met Leu $35 \hspace{1cm} 40 \hspace{1cm} 45$

Pro Pro His Leu Thr Glu Asn Gly Ala Val Met Ile Gln Phe Gly His 50 60

Gln Met Pro Asp Tyr Asp Ser Pro Ala Thr Gln Ser Thr Ser Glu Thr 65 70 75 80

Ser His Gln Glu Ala Ser Gly Met Ser Glu Gly Ser Leu Asn Glu His \$85\$ 90 95

Asn Asn Asp His Ser Gly Asn Leu Asp Gly Tyr Ser Lys Ser Asp Glu

Asn Lys Met Met Ser Ala Leu Ser Leu Gly Asn Pro Glu Thr Ala Tyr
115 120 125

```
Ala His Asn Pro Lys Pro Asp Arg Thr Gln Ser Phe Ala Ile Ser Tyr 130 140
```

Pro Tyr Ala Asp Pro Tyr Tyr Gly Gly Ala Val Ala Ala Ala Tyr Gly 145 150 155 160

Pro His Ala Ile Met

165

- (2) INFORMATION FOR SEQ ID NO:4213:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 119 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..119
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579924
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4213:

Met Leu Pro Pro His Leu Thr Glu Asn Gly Ala Val Met Ile Gln Phe 1 5 10 15

Gly His Gln Met Pro Asp Tyr Asp Ser Pro Ala Thr Gln Ser Thr Ser 20 25 30

Glu Thr Ser His Gln Glu Ala Ser Gly Met Ser Glu Gly Ser Leu Asn 35 40 45

Glu His Asn Asn Asp His Ser Gly Asn Leu Asp Gly Tyr Ser Lys Ser 50 55 60

Asp Glu Asn Lys Met Met Ser Ala Leu Ser Leu Gly Asn Pro Glu Thr 65 70 75 80

Ala Tyr Ala His Asn Pro Lys Pro Asp Arg Thr Gln Ser Phe Ala Ile 85 90 95

Ser Tyr Pro Tyr Ala Asp Pro Tyr Tyr Gly Gly Ala Val Ala Ala Ala 100 \$105\$

Tyr Gly Pro His Ala Ile Met 115

- (2) INFORMATION FOR SEQ ID NO: 4214:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 107 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..107
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579925
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4214:

Gln Ser Thr Ser Glu Thr Ser His Gln Glu Ala Ser Gly Met Ser Glu 20 25 30

Gly Ser Leu Asn Glu His Asn Asn Asp His Ser Gly Asn Leu Asp Gly 35 40 45

Tyr Ser Lys Ser Asp Glu Asn Lys Met Met Ser Ala Leu Ser Leu Gly 50 60

Asn Pro Glu Thr Ala Tyr Ala His Asn Pro Lys Pro Asp Arg Thr Gln 65 70 75 80

Ser Phe Ala Ile Ser Tyr Pro Tyr Ala Asp Pro Tyr Tyr Gly Gly Ala 85 90 95

Val Ala Ala Ala Tyr Gly Pro His Ala Ile Met 100 105

(2) INFORMATION FOR SEQ ID NO: 4215:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 436 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..436
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579926
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4215:

agcagggegt tgggegagtg agtgagtcag tgaggetggg atagcagcag cagtgegeeg 60 cactcaactt ctcttcttge cgtgeggtgt gegeggegeg gggaggeace geacggeege 120 aagcaatgee gegeeggeag aggaeggeag geagegagga geteaaggeg gaggaetteg 180 tegacteggt geteaactte ggeggegagg aggaggatgg ggaagaggag aagcaggagg 240 ceggegggga eggeeageeg geggeggagt teaagteeaa gaacetggag geegagegga 300 ageggeggg caageteaae egcaacatee tegegeteag ggeegtggtg eegaacatea 260 ceaagatgag caaggagtee accetetegg aegetatega ecteateaag aageteeaga 420 accaggteet tgaget

- (2) INFORMATION FOR SEQ ID NO:4216:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 103 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..103
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579927
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4216:

Met Pro Arg Arg Gln Arg Thr Arg Ser Ser Glu Glu Leu Lys Ala Glu
1 10 15

Asp Phe Val Asp Ser Val Leu Asn Phe Gly Gly Glu Glu Asp Gly 20 25 30

Phe Lys Ser Lys Asn Leu Glu Ala Glu Arg Lys Arg Gly Lys Leu 50 55 60

Asn Arg Asn Ile Leu Ala Leu Arg Ala Val Val Pro Asn Ile Thr Lys 70 75 80

Met Ser Lys Glu Ser Thr Leu Ser Asp Ala Ile Asp Leu Ile Lys Lys 85 90 95

Leu Gln Asn Gln Val Leu Glu

100

- (2) INFORMATION FOR SEQ ID NO:4217:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..278
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579931
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4217:

ctaataaacc gtgccctcc gtcccaaccg tccgccgcct ccctcccttt ccgctccgcc 60
aagaccctcc tcctcacccc actcacccag ctcccctcga gcccagaagc accgcgcgca 120
ccatgcggcc accgagaggg cgcgggggg gcggggttc ggcggaggtg gaggccgagg 180
cqqcqqcqt ggccggttcg gcggggggg ccgtggtggc cggttcggc gcgggttccg 240

cgacgagggc ccgccgcag aggttcgtcg aggtgtcg

- (2) INFORMATION FOR SEQ ID NO:4218:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 92 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..92
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579932
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4218:

Leu Ile Asn Arg Ala Pro Pro Ser Gln Pro Ser Ala Ala Ser Leu Pro 1 5 10 15

Phe Arg Ser Ala Lys Thr Leu Leu Leu Thr Pro Leu Thr Gln Leu Pro 20 25 30

Ser Ser Pro Glu Ala Pro Arg Ala Pro Cys Gly His Arg Glu Gly Ala 35 40 45

Ala Ala Ala Val Arg Arg Trp Arg Pro Arg Arg Arg Trp 50 55 60

Pro Val Arg Arg Arg Pro Trp Trp Pro Val Arg Arg Arg Val Pro 65 70 75 80

- (2) INFORMATION FOR SEQ ID NO: 4219:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 92 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..92
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579933
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4219:

Asn Lys Pro Cys Pro Ser Val Pro Thr Val Arg Arg Leu Pro Pro Phe 1 5 10 15

Pro Leu Arg Gln Asp Pro Pro Pro His Pro Thr His Pro Ala Pro Leu 20 25 30

Glu Pro Arg Ser Thr Ala Arg Thr Met Arg Pro Pro Arg Gly Arg Gly 35 40 45

Gly Gly Gly Ger Ala Glu Val Glu Ala Glu Ala Ala Val Ala 50 55 60

Gly Ser Ala Ala Glu Ala Val Val Ala Gly Ser Ala Ala Gly Ser Ala 65 70 75 80

Thr Arg Ala Arg Pro Gln Arg Phe Val Glu Val Ser 85 90

- (2) INFORMATION FOR SEQ ID NO: 4220:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 52 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..52
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579934
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4220:

Met Arg Pro Pro Arg Gly Arg Gly Gly Gly Gly Ser Ala Glu Val 10 Glu Ala Glu Ala Ala Val Ala Gly Ser Ala Ala Glu Ala Val Val 30 25 Ala Gly Ser Ala Ala Gly Ser Ala Thr Arg Ala Arg Pro Gln Arg Phe 40 Val Glu Val Ser

50

- (2) INFORMATION FOR SEQ ID NO:4221:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 459 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..459
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579953
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4221:

60 aaaacgctga tcggagcaac gaagcccgca gccatgccga cggcgacggc cacggcagct cetegecacg eggegetett cetgeceetg etgetgetee tgeteggeet ecaegecacg 120 teegeegeeg eegegegee gggegtegee gtggaegeeg ageteaegte caccaageeg 180 tecceggtee egaagaagee cagegtgaag eegeeeggee eeggegeege gageeegaee 240 300 tteccqqqct tcgqcatccc cqgqatqgqc qggttcgqca tccccqgqat ggqcqccgqc 360 qqqtqqqqq qcqqctacqq cgggcccgcc ggcgggtacg cccgcggcgg cgtggtggcg 420 cccaccqtqa cqtqctccqa qaaggggccc tgctacagga agaaggtcac ctgccccaag aaqtqcttct cctcqtacag cggcgcggca aggggtacg

- (2) INFORMATION FOR SEQ ID NO: 4222:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 153 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..153
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579954
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4222:

Lys Thr Leu Ile Gly Ala Thr Lys Pro Ala Ala Met Pro Thr Ala Thr 5 10

Ala Thr Ala Ala Pro Arg His Ala Ala Leu Phe Leu Pro Leu Leu 25

Leu Leu Cly Leu His Ala Thr Ser Ala Ala Ala Arg Ala Gly 45 40

Val Ala Val Asp Ala Glu Leu Thr Ser Thr Lys Pro Ser Pro Val Pro 55 60

Lys Lys Pro Ser Val Lys Pro Pro Gly Pro Gly Ala Ala Ser Pro Thr 70 75

Phe Pro Gly Phe Gly Ile Pro Gly Met Gly Gly Phe Gly Ile Pro Gly 90

Met Gly Ala Gly Gly Trp Gly Gly Gly Tyr Gly Gly Pro Ala Gly Gly 105

Tyr Ala Arg Gly Gly Val Val Ala Pro Thr Val Thr Cys Ser Glu Lys 125 120

Gly Pro Cys Tyr Arg Lys Lys Val Thr Cys Pro Lys Lys Cys Phe Ser 135 140

Ser Tyr Ser Gly Ala Ala Arg Gly Thr

150

(2) INFORMATION FOR SEQ ID NO: 4223:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 152 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..152
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579955
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4223:

Asn Ala Asp Arg Ser Asn Glu Ala Arg Ser His Ala Asp Gly Asp Gly 10

His Gly Ser Ser Pro Arg Gly Ala Leu Pro Ala Pro Ala Ala Ala 25 20

Pro Ala Arg Pro Pro Arg His Val Arg Arg Arg Arg Ala Arg Gly Arg 40

Arg Arg Gly Arg Arg Ala His Val His Gln Ala Val Pro Gly Pro Glu 55

Glu Ala Gln Arg Glu Ala Ala Arg Pro Arg Arg Glu Pro Asp Leu 75 70

Pro Gly Leu Arg His Pro Arg Asp Gly Arg Val Arg His Pro Arg Asp 90 8.5

Gly Arg Arg Arg Val Gly Arg Arg Leu Arg Arg Ala Arg Arg Val 105 100

Arg Pro Arg Arg Gly Gly Ala His Arg Asp Val Leu Arg Glu Gly 125 120

Ala Leu Leu Gln Glu Glu Gly His Leu Pro Gln Glu Val Leu Leu 130 135

Val Gln Arg Arg Gly Lys Gly Tyr 150

- (2) INFORMATION FOR SEQ ID NO: 4224:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 142 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:

130

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..142
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579956
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4224:

Met Pro Thr Ala Thr Ala Thr Ala Ala Pro Arg His Ala Ala Leu Phe 5 10

Leu Pro Leu Leu Leu Leu Leu Gly Leu His Ala Thr Ser Ala Ala 25 20

Ala Ala Arg Ala Gly Val Ala Val Asp Ala Glu Leu Thr Ser Thr Lys 4.5 4.0

Pro Ser Pro Val Pro Lys Lys Pro Ser Val Lys Pro Pro Gly Pro Gly 5.5 60

Ala Ala Ser Pro Thr Phe Pro Gly Phe Gly Ile Pro Gly Met Gly Gly 75 70

Phe Gly Ile Pro Gly Met Gly Ala Gly Gly Trp Gly Gly Gly Tyr Gly 90

85 Gly Pro Ala Gly Gly Tyr Ala Arg Gly Gly Val Val Ala Pro Thr Val 105 110 100

Thr Cys Ser Glu Lys Gly Pro Cys Tyr Arg Lys Lys Val Thr Cys Pro 125

120 Lys Lys Cys Phe Ser Ser Tyr Ser Gly Ala Ala Arg Gly Thr 135

- (2) INFORMATION FOR SEQ ID NO:4225:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 524 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..524
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579968
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4225:

ttttagcacc acctctcatg actaynacat ttctttcggg aaagtagaaa aaaatctatt acccatgagg ccatgatact ttccacttgg acgaagcgaa attgttaatt cctcccttcc agtatatagc tcgctcgctc acactcggag ctcgtaacaa agtcatcact catcacatga gcttgcttgt gactgccagc tttgcccagt gttcatcgcc catggaagag cgggcactgt tcccggtgtc cgattccagc accacctgca gcagctctgg ctgtaccggc cccaaactccc cggaagcggcc gcgcgggag ctgaagcac ccagcgacgg cgccggcagc tcgagcagcc ggggcaagtg ggtgccgag atccgggagc cccgcaagaa gtcgcgcatc tggctggca 480 ccttcgacac tccccmgaga tggccgcgc cgcgcatgac gtcg

- (2) INFORMATION FOR SEQ ID NO:4226:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 116 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..116
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579969
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4226:
- Met Ser Leu Leu Val Thr Ala Ser Phe Ala Gln Cys Ser Ser Pro Met 1 5 10 15
- Glu Glu Arg Ala Leu Phe Pro Val Ser Asp Ser Ser Thr Thr Cys Ser 20 25 30
- Ser Ser Gly Cys Thr Gly Pro Asn Ser Pro Val Ser Ser Ser Gln Tyr 35 40 45
- Leu Asp Asp Thr Ser Asp Gly Ala Gly Ser Ser Ser Ser Arg Lys Arg 50 55 60
- Pro Arg Arg Glu Leu Lys His Pro Thr Tyr Arg Gly Val Arg Met Arg 65 70 75 80
- Ala Trp Gly Lys Trp Val Ser Glu Ile Arg Glu Pro Arg Lys Lys Ser 85 90 95
- Arg Ile Trp Leu Gly Thr Phe Asp Thr Pro Xaa Arg Trp Pro Arg Ala 100 105 110

Arg Met Thr Ser

115

- (2) INFORMATION FOR SEQ ID NO:4227:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 101 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..101
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579970
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4227:

```
Met Glu Glu Arq Ala Leu Phe Pro Val Ser Asp Ser Ser Thr Thr Cys
                                    10
Ser Ser Ser Gly Cys Thr Gly Pro Asn Ser Pro Val Ser Ser Ser Gln
            20
                                25
Tyr Leu Asp Asp Thr Ser Asp Gly Ala Gly Ser Ser Ser Arg Lys
                            40
Arg Pro Arg Arg Glu Leu Lys His Pro Thr Tyr Arg Gly Val Arg Met
                        55
                                            60
Arg Ala Trp Gly Lys Trp Val Ser Glu Ile Arg Glu Pro Arg Lys Lys
                    70
                                       75
Ser Arg Ile Trp Leu Gly Thr Phe Asp Thr Pro Xaa Arg Trp Pro Arg
                85
                                    90
Ala Arg Met Thr Ser
            100
(2) INFORMATION FOR SEQ ID NO: 4228:
     (i) SEQUENCE CHARACTERISTICS:
```

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..513
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579975
- (2) INFORMATION FOR SEQ ID NO:4229:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 113 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..113
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579976
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4229:
- Leu His Pro Ser Gln Ser Arg Ser Ser Leu Ser Pro Thr Phe Thr Ser 1 5 5 10 10 15 Pro Ala Leu Ser Val Leu Glu Leu Ala His Ile Arg Gly Arg Lys Arg
- 20 25 30 Asn Gln His Leu Pro Arg His Val Val Leu His Gly Val Gln Glu Arg
- 35 40 45
 Ala Ala Ala Gly Arg Val Arg Arg Arg Arg Gln Arg Arg Gly
 50 55 60
- Arg Ala Gly Asp Glu Leu Pro Val Pro Ala Pro Arg Gly Gly Gly Ala 65 70 75 80
- Gly Gln Gly Arg Arg Ala Ala Pro His Pro Pro Pro Glu Ala Pro Arg 85 90 95
- Pro Pro Pro Arg His Ala Ala Leu His Gly Ala Gly Ala Ala Ala Val 100 105 110

Gly

- (2) INFORMATION FOR SEQ ID NO:4230:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 98 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..98
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579977
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4230:

Met Ser Ser Ser Met Val Ser Lys Asn Ala Pro Pro Pro Ala Gly Tyr
1 5 10 15

Leu Tyr Leu Arg Pro Gly Ala Gly Ala Leu Asp Arg Asp Ala Val Leu 35 40 45

Arg Arg Ile Arg His Arg Arg His Asp Arg Leu His Asp Thr Leu 50 55 60

Arg Ser Met Val Gln Ala Pro Pro Arg Ser Ala Glu Pro Asp Gly Met

70

75

80

80

Asp Gly Ala Glu Arg His Leu Pro Trp Pro Leu Asp Asp Ala Phe Ser 85 90 95

Ala Pro

- (2) INFORMATION FOR SEQ ID NO:4231:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 94 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..94
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579978
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4231:

Met Val Ser Lys Asn Ala Pro Pro Pro Ala Gly Tyr Gly Asp Gly Glu 1 5 10 15

Gly Ser Val Val Glu Ala Ala Pro Val Thr Ser Cys Leu Tyr Leu Arg 20 25 30

Pro Gly Ala Gly Ala Leu Asp Arg Asp Ala Val Leu Arg Arg Ile Arg 35 40 45

His Arg Arg Arg His Asp Arg Leu His Asp Thr Leu Arg Ser Met Val 50 55 60

Gln Ala Pro Pro Arg Ser Ala Glu Pro Asp Gly Met Asp Gly Ala Glu 65 70 75 80

Arg His Leu Pro Trp Pro Leu Asp Asp Ala Phe Ser Ala Pro 85 90

- (2) INFORMATION FOR SEQ ID NO:4232:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 481 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -

420

480

- (B) LOCATION: 1..481
- (D) OTHER INFORMATION: / Ceres Seq. ID 1579979

teettgaggg egetgatget geeageegag tgeegttgee egaggggage ateeaagtat

tcgtcatgtc tgagaacctg tcagctgtgc agaaggagga catggcgtgg gcgtcgtacg

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4232:

 ctetccacge cegegeaceg cegeteegee acteceacet tetacteace geogecaceg 60

 cteggeteeg ceegtgegea gegecagega ceaageeeg cegeegetee etegteeteg 120

 teegegeete cageteggae ceteegeage ageageteaa ceteteegtg eteegettea 180

 ceetegggat teeggggetg gacgaategt aceteeeeg gtggatagge eteggtteg 240

 gegegetegt egtgeteaac caceteetet etgegteeee gacgeeegeg cageteaggt 300

 cegaggetgt gaggetgtg etggeeget teteggegae getgeegtte etggggaggt 360
- t (2) INFORMATION FOR SEQ ID NO:4233:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 121 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..121
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579980
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4233:
- Ser Pro Arg Pro Arg Thr Ala Ala Pro Pro Leu Pro Pro Ser Thr His 1 5 10 15
- Arg Arg His Arg Ser Ala Pro Pro Val Arg Ser Ala Ser Asp Gln Ala 20 25 30
- Pro Pro Pro Leu Pro Arg Pro Arg Pro Arg Leu Gln Leu Gly Pro Ser 35 40 45
- Ala Ala Ala Gln Pro Leu Arg Ala Pro Leu His Pro Arg Asp Ser 50 55 60
 Gly Ala Gly Arg Ile Val Pro Pro Pro Val Asp Arg Pro Arg Phe Arg
- 65 70 75 80
 Arg Ala Arg Arg Ala Gln Pro Pro Pro Leu Cys Val Pro Asp Ala Arg
- 85 90 95
 Ala Ala Gin Val Arg Gly Cys Gly Ala Val Pro Gly Arg Val Leu Gly
- Ala Ala Gln Val Arg Gly Cys Gly Ala Val Pro Gly Arg Val Leu Gly 100 105 110
- Asp Ala Ala Val Pro Gly Glu Val Pro 115 120
- (2) INFORMATION FOR SEQ ID NO: 4234:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 159 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..159
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579981
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4234:
- Leu His Ala Arg Ala Pro Pro Leu Arg His Ser His Leu Leu Thr

 1 5 10 15
- Ala Ala Thr Ala Arg Leu Arg Pro Cys Ala Ala Pro Ala Thr Lys Pro 20 25 30
- Arg Arg Arg Ser Leu Val Leu Val Arg Ala Ser Ser Ser Asp Pro Pro 35 40 45
- Gln Gln Gln Leu Asn Leu Ser Val Leu Arg Phe Thr Leu Gly Ile Pro 50 55 60
- Gly Leu Asp Glu Ser Tyr Leu Pro Arg Trp Ile Gly Leu Gly Phe Gly

Asn Leu Ser Ala Val Gln Lys Glu Asp Met Ala Trp Ala Ser Tyr
145 150 155

- (2) INFORMATION FOR SEQ ID NO:4235:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 482 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..482
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579986
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4235:

cgaggagtta tggagttaat gttgtagttg caatcaacaa atttgcatca gatactgagg 60 cagaaatgaa ggcagtgcac agtgcagcta tggctgctgg tgcttttgac gctgttgtct 120 qcacacca tqcccatggt ggtaaaggag cggttgagct tggacttgct gttcaacgag 180 240 catqcqaaaq ccaqqcaqaa cctctgaagt ttttgtatcc cttggaatct agcataaagg agaagattga gtcaattgct aagttctatg gtgctagtgg cgttgaatat tccgagcagg 300 ctgagaagca gattgagatg tacaccaagc aagggttete cageeteece atttgeatgg 360 cgaagaccca gtactcgttc tcacatgtcc cgtccatgaa gggcgccccg accggctttg 420 ttctqccqat aagagacgtg agggccagca tcggcgctgg gttcatctac ccgctcgtgg ac

- (2) INFORMATION FOR SEQ ID NO: 4236:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 160 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..160
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579987
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4236:

Asp Thr Glu Ala Glu Met Lys Ala Val His Ser Ala Ala Met Ala Ala 20 25 30

Gly Ala Phe Asp Ala Val Val Cys Thr His His Ala His Gly Gly Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Ala Val Glu Leu Gly Leu Ala Val Gln Arg Ala Cys Glu Ser Gln 50 60

Ala Glu Pro Leu Lys Phe Leu Tyr Pro Leu Glu Ser Ser Ile Lys Glu 65 70 75 80

Lys Ile Glu Ser Ile Ala Lys Phe Tyr Gly Ala Ser Gly Val Glu Tyr 85 90 95

Ser Glu Gln Ala Glu Lys Gln Ile Glu Met Tyr Thr Lys Gln Gly Phe 100 105 110

Ser Ser Leu Pro Ile Cys Met Ala Lys Thr Gln Tyr Ser Phe Ser His 115 120 125 Val Pro Ser Met Lys Gly Ala Pro Thr Gly Phe Val Leu Pro Ile Arg 130 135 140
Asp Val Arg Ala Ser Ile Gly Ala Gly Phe Ile Tyr Pro Leu Val Gly
145 150 155 160

- (2) INFORMATION FOR SEQ ID NO:4237:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 139 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..139
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579988
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4237:

Met Lys Ala Val His Ser Ala Ala Met Ala Ala Gly Ala Phe Asp Ala 1 5 10 15

Val Val Cys Thr His His Ala His Gly Gly Lys Gly Ala Val Glu Leu $20 \\ \hspace{1.5cm} 25 \\ \hspace{1.5cm} 30$

Gly Leu Ala Val Gln Arg Ala Cys Glu Ser Gln Ala Glu Pro Leu Lys 35 40 45

Phe Leu Tyr Pro Leu Glu Ser Ser Ile Lys Glu Lys Ile Glu Ser Ile 50 60

Ala Lys Phe Tyr Gly Ala Ser Gly Val Glu Tyr Ser Glu Gln Ala Glu 65 70 75 80

Lys Gln Ile Glu Met Tyr Thr Lys Gln Gly Phe Ser Ser Leu Pro Ile 85 90 95

Cys Met Ala Lys Thr Gln Tyr Ser Phe Ser His Val Pro Ser Met Lys 100 105 110

Gly Ala Pro Thr Gly Phe Val Leu Pro Ile Arg Asp Val Arg Ala Ser 115 120 125

- (2) INFORMATION FOR SEQ ID NO:4238:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 131 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..131
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579989
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4238:

Met Ala Ala Gly Ala Phe Asp Ala Val Val Cys Thr His His Ala His 1 5 10 15

Gly Gly Lys Gly Ala Val Glu Leu Gly Leu Ala Val Gl
n Arg Ala Cys $20 \\ 25 \\ 30$

Glu Ser Gln Ala Glu Pro Leu Lys Phe Leu Tyr Pro Leu Glu Ser Ser 35 40 45

Ile Lys Glu Lys Ile Glu Ser Ile Ala Lys Phe Tyr Gly Ala Ser Gly 50 55 60

Val Glu Tyr Ser Glu Gln Ala Glu Lys Gln Ile Glu Met Tyr Thr Lys
65 70 75 80

Gln Gly Phe Ser Ser Leu Pro Ile Cys Met Ala Lys Thr Gln Tyr Ser 85 90 95

Phe Ser His Val Pro Ser Met Lys Gly Ala Pro Thr Gly Phe Val Leu 100 105 110

Pro Ile Arg Asp Val Arg Ala Ser Ile Gly Ala Gly Phe Ile Tyr Pro
115 120 125

Leu Val Gly

130

- (2) INFORMATION FOR SEQ ID NO:4239:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..433
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579994
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4239:

 acaatttgat tttgacccgt cgcctgcctg gccgcctcct agtcgtaatc ccgcccgcc gcctcccccct ctccggcctt ctccgctccg cgcggggcgc atgtcggtga cgctgcacac gaacctgggc gacatcaagt gcgaggtgtt ctgcgaccag gtgccgcga cggcggagaa cttcctggcg ctctgcggca gcggctacta cgacggcacc gtgttccacc gcaacatcaa gggcttcatg gtccagggcg gcgaccccac cggcaccggc aagggcgggt cgtccatctg gggcgccaag ttcgcggacg agttgaggga gtcgctcaag cacaacgcgc gcgggatcat gtcgatggc aacaggggc ccaacaccaa cggcagccag ttcttcatca cctacgccaa daggcgcgac ctc
- (2) INFORMATION FOR SEQ ID NO:4240:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 144 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..144
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1579995
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4240:
- Gln Phe Asp Phe Asp Pro Ser Pro Ala Trp Pro Pro Pro Ser Arg Asn 1 5 10 15
 Pro Ala Pro Pro Pro Pro Pro Leu Arg Pro Ser Pro Leu Arg Ala Gly

20 25 30

Ala Met Ser Val Thr Leu His Thr Asn Leu Gly Asp Ile Lys Cys Glu

la Met Ser Val Thr Leu His Thr Asn Leu Gly Asp lie Lys Cys Glu 35 40 45

Val Phe Cys Asp Gln Val Pro Arg Thr Ala Glu Asn Phe Leu Ala Leu
50 55 60

Cys Gly Ser Gly Tyr Tyr Asp Gly Thr Val Phe His Arg Asn Ile Lys 65 70 75 80

Gly Phe Met Val Gln Gly Gly Asp Pro Thr Gly Thr Gly Lys Gly Gly 85 90 95

Ser Ser Ile Trp Gly Ala Lys Phe Ala Asp Glu Leu Arg Glu Ser Leu 100 105 110

Lys His Asn Ala Arg Gly Ile Met Ser Met Ala Asn Ser Gly Pro Asn 115 120 125

Thr Asn Gly Ser Gln Phe Phe Ile Thr Tyr Ala Lys Gln Pro His Leu 130 135 140

- (2) INFORMATION FOR SEQ ID NO: 4241:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 111 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:

(D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..111 (D) OTHER INFORMATION: / Ceres Seq. ID 1579996 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4241: Met Ser Val Thr Leu His Thr Asn Leu Gly Asp Ile Lys Cys Glu Val 10 Phe Cys Asp Gln Val Pro Arg Thr Ala Glu Asn Phe Leu Ala Leu Cys 25 Gly Ser Gly Tyr Tyr Asp Gly Thr Val Phe His Arg Asn Ile Lys Gly 40 Phe Met Val Gln Gly Gly Asp Pro Thr Gly Thr Gly Lys Gly Gly Ser Ser Ile Trp Gly Ala Lys Phe Ala Asp Glu Leu Arg Glu Ser Leu Lys 70 75 His Asn Ala Arg Gly Ile Met Ser Met Ala Asn Ser Gly Pro Asn Thr 90 85 Asn Gly Ser Gln Phe Phe Ile Thr Tyr Ala Lys Gln Pro His Leu 105 100 (2) INFORMATION FOR SEQ ID NO:4242: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 291 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..291 (D) OTHER INFORMATION: / Ceres Seq. ID 1580028 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4242: acctggccgc caccttcctt ctacctcgtc cccctgcttc cctgaccgag cagcgcccag 60 gcaaccgcat agcaccgcgt gaccctgacc gccaggagcc cgaccggccg aagccccacc 120 gccaggacgc cagccgcgcc acccgacccg aagccgcccg cgtccctgca cacgacgcgc 180 caccgaggac cgacgccagg actcgaccgc gacccaggct accgtcgcca cgtcgccca 240 ggccgagccc tgcatccgcg ccgagcgacc gcgccaggaa cccgacaccc g (2) INFORMATION FOR SEQ ID NO: 4243: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 96 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..96 (D) OTHER INFORMATION: / Ceres Seq. ID 1580029 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4243: Leu Ala Ala Thr Phe Leu Leu Pro Arg Pro Pro Ala Ser Leu Thr Glu 5 1.0 Gln Arg Pro Gly Asn Arg Ile Ala Pro Arg Asp Pro Asp Arg Gln Glu 2.5 Pro Asp Arg Pro Lys Pro His Arg Gln Asp Ala Ser Arg Ala Thr Arg 40 Pro Glu Ala Ala Arg Val Pro Ala His Asp Ala Pro Pro Arg Thr Asp 55 Ala Arg Thr Arg Pro Arg Pro Arg Leu Pro Ser Pro Arg Arg Ala Arg 75 70

Pro Ser Pro Ala Ser Ala Pro Ser Asp Arg Ala Arg Asn Pro Thr Pro

90 95 85

- (2) INFORMATION FOR SEQ ID NO: 4244: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 302 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..302
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580030
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4244: atttettece ttegecatga egeogeegee geegeeteeg tgeetegeet geeteeteae cetectecte etegeogeeg eggeggegey aceggeegge gecatetgeg teeegegeaa teceggtgge cacageaage caggagegee ggecaageee gegecaeega aactaaagee ceteacquee geggegeegg egecgeegaa geegaegeeg atggeeeegg gegeegaeat cgtgcggagc ctgtgcctga agaccgacta ccccgacctg tgcatgtcgg ccatcgcgaa
- (2) INFORMATION FOR SEQ ID NO: 4245:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..100
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580031
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4245:
- Ile Ser Ser Leu Arg His Asp Ala Ala Ala Ala Ser Val Pro Arg 10 5

Leu Pro Pro His Pro Pro Pro Pro Arg Arg Gly Gly Xaa Thr Gly 20 25

Arg Arg His Leu Arg Pro Ala Gln Ser Arg Trp Pro Gln Gln Ala Arg 40 45

Ser Ala Gly Gln Ala Arg Ala Thr Glu Thr Lys Ala Pro His Ala Arg 55 60

Gly Ala Gly Ala Ala Glu Ala Asp Ala Asp Gly Pro Gly Arg Arg His 75 70

Arg Ala Glu Pro Val Pro Glu Asp Arg Leu Pro Arg Pro Val His Val 90 85

Gly His Arg Glu

100

- (2) INFORMATION FOR SEQ ID NO: 4246:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..100
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580032
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4246:

Phe Leu Pro Phe Ala Met Thr Pro Pro Pro Pro Pro Pro Cys Leu Ala 10

```
Attorney Docket No. 2750-1235P
Client Docket No. 80145.003
Cys Leu Leu Thr Leu Leu Leu Ala Ala Ala Ala Xaa Pro Ala
                                25
Gly Ala Ile Cys Val Pro Arg Asn Pro Gly Gly His Ser Lys Pro Gly
                            40
Ala Pro Ala Lys Pro Ala Pro Pro Lys Leu Lys Pro Leu Thr Pro Ala
                        55
Ala Pro Ala Pro Pro Lys Pro Thr Pro Met Ala Pro Gly Ala Asp Ile
                    70
                                        75
Val Arg Ser Leu Cys Leu Lys Thr Asp Tyr Pro Asp Leu Cys Met Ser
                                    90
Ala Ile Ala Lys
            100
(2) INFORMATION FOR SEQ ID NO: 4247:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 95 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..95
          (D) OTHER INFORMATION: / Ceres Seq. ID 1580033
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4247:
Met Thr Pro Pro Pro Pro Pro Cys Leu Ala Cys Leu Leu Thr Leu
                                    1.0
                5
Leu Leu Leu Ala Ala Ala Ala Xaa Pro Ala Gly Ala Ile Cys Val
            20
                                2.5
                                                    30
Pro Arg Asn Pro Gly Gly His Ser Lys Pro Gly Ala Pro Ala Lys Pro
                            40
Ala Pro Pro Lys Leu Lys Pro Leu Thr Pro Ala Ala Pro Ala Pro Pro
                        55
Lys Pro Thr Pro Met Ala Pro Gly Ala Asp Ile Val Arg Ser Leu Cys
                   70
                                        75
Leu Lys Thr Asp Tyr Pro Asp Leu Cys Met Ser Ala Ile Ala Lys
                85
(2) INFORMATION FOR SEQ ID NO:4248:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 416 base pairs
          (B) TYPE: nucleic acid
```

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..416
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580051
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4248:

60 egegeetect etegeceteg eteegeegee geegeegee egeegeatea ageaeeegee 120 ccqccqtcqc ctgaggtaga caccaatccg ccgccatggg gcgtatgcac agccgcggga agggtatete ategteggeg etgeegtaea agaggaegee teeteeettg teaagateet ccqcatcctc aaggcccatg ggctggcacc agaaatcccc gaggacctgt acttcctcat 240 300 caaqaaqqcq qtqqcqataa ggaagcacct tgagaggaac aggaaggaca aagactctaa attcaggete attettgtgg agageaggat ceaeegeett geeegetaet acaagegeae aaaqaaqett ccacccacct ggaagtatga gtcaaccaca gcgagcactc tggtgg

- (2) INFORMATION FOR SEQ ID NO:4249:
 - (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 90 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..90
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580052
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4249:
- Arg Ala Ser Ser Arg Pro Arg Ser Ala Ala Ala Ala Ala Pro Pro His

 1 10 15
- Gln Ala Pro Ala Pro Pro Ser Pro Glu Val Asp Thr Asn Pro Pro Pro 20 25 30
- Trp Gly Val Cys Thr Ala Ala Gly Arg Val Ser His Arg Arg Cys 35 40 45
- Arg Thr Arg Gly Arg Leu Leu Pro Cys Gln Asp Pro Pro His Pro Gln 50 55 60
- Gly Pro Trp Ala Gly Thr Arg Asn Pro Arg Gly Pro Val Leu Pro His 65 70 75 80
- Gln Glu Gly Gly Gly Asp Lys Glu Ala Pro 85 90
- (2) INFORMATION FOR SEQ ID NO: 4250:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 54 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..54
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580053
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4250:
- Met Gly Arg Met His Ser Arg Gly Lys Gly Ile Ser Ser Ser Ala Leu
 1 10 15
- Pro Tyr Lys Arg Thr Pro Pro Pro Leu Ser Arg Ser Ser Ala Ser Ser 20 25 30
- Arg Pro Met Gly Trp His Gln Lys Ser Pro Arg Thr Cys Thr Ser Ser 35 40 45

Ser Arg Arg Trp Arg

- (2) INFORMATION FOR SEQ ID NO: 4251:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..51
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580054
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4251:
- Met His Ser Arg Gly Lys Gly Ile Ser Ser Ser Ala Leu Pro Tyr Lys 1 5 10 15
- Arg Thr Pro Pro Pro Leu Ser Arg Ser Ser Ala Ser Ser Arg Pro Met 20 25 30
- Gly Trp His Gln Lys Ser Pro Arg Thr Cys Thr Ser Ser Ser Arg Arg 35 40 45

Arg Trp Arg

50

- (2) INFORMATION FOR SEQ ID NO: 4252:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 290 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..290
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580058
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4252:

 atatatagat tatagagagg caaacaaacc tegeccacte caacacgtga cacceegegg 60
 cgcgceteeg eegeageee ceaetetete accgccaceg eegagatgge egeetgetee 120
 cacctegeeg eegegggtgg etetteeeet geegeegeeg eagtggtteg tteeceggeg 180
 catteeteag eegeegeege ettegegege eteeggtega egetgettt etegagegee 240
 qqcetqteqg ttaaqqqaaq eagqqeqact tteecegtqqq tegeegeege
- (2) INFORMATION FOR SEQ ID NO:4253:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 96 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..96
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580059
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4253:

Tyr Ile Asp Tyr Arg Glu Ala Asn Lys Pro Arg Pro Leu Gln His Val 1 5 10 15

Thr Pro Arg Gly Ala Pro Pro Pro His Ala Pro Thr Leu Ser Pro Pro 20 25 30

Pro Pro Arg Trp Pro Pro Ala Pro Thr Ser Pro Pro Arg Val Ala Leu 35 40 45

Pro Leu Pro Pro Pro Gln Trp Phe Val Pro Arg Arg Ile Pro Gln Pro 50 55 60

Pro Pro Pro Ser Arg Ala Ser Gly Arg Arg Cys Val Ser Arg Ala Pro 65 70 75 80

Ala Cys Arg Leu Arg Glu Ala Gly Arg Leu Ser Arg Gly Ser Pro Pro 85 90 95

- (2) INFORMATION FOR SEQ ID NO: 4254:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..61
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580060
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4254:

Met Ala Ala Cys Ser His Leu Ala Ala Ala Gly Gly Ser Ser Pro Ala 1 10 15

Ala Ala Val Val Arg Ser Pro Ala His Ser Ser Ala Ala Ala Ala 20 25 30

Phe Ala Arg Leu Arg Ser Thr Leu Arg Phe Ser Ser Ala Gly Leu Ser 35 40 45

Val Lys Gly Ser Arg Ala Thr Phe Pro Trp Val Ala Ala 50 55 60

(2) INFORMATION FOR SEQ ID NO:4255:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 448 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..448
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580061
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4255:

atetteaceg geagegeace aegeegeege egeegeegte eeaegeattg tetgttgete agetteteet ageetaegee etgetageet aggetgetae ataetgeeat 120 cateeatgga gtegeeteet gateaggegg eggeggegge ggeggeege gaeaaggage 180 ageggggegg gtaceette geaaaageeg tegaegaage gtacegggeg gtggagtgeg 240 aegeeggegg eeaeaacteg gteeggaagg aegeeggee geggeggeae gaegaggtgg 300 teageagaag ecaeaacteg gteeggaagg aegeegaee gteggegae gegaagtga 360 eegeeateag aeaggegtge aagaagetgg ggaaaaceag eetegeegge tgegagatet 420 aeaegteetg egageegtee egatgtge

- (2) INFORMATION FOR SEQ ID NO: 4256:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 148 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..148
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580062
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4256:

Leu His Arg Gln Arg Thr Thr Pro Pro Pro Pro Pro Ser His Ala Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Ser Val Ala Gl
n Leu Leu Leu Ala Gl
n Leu Leu Leu Leu Ala Arg Leu Gly $20 \\ 25 \\ 30$

Leu Gly Cys Tyr Ile Leu Pro Ser Ser Met Glu Ser Pro Pro Asp Gln 35 40 45

Ala Ala Ala Ala Ala Arg Gln Asp Lys Glu Gln Arg Asp Tyr Arg 50 55 60

Leu Ile Ala Lys Ala Val Asp Glu Ala Tyr Arg Ala Val Glu Cys Asp 65 70 75 80

Gly Gly Gly Tyr Pro Phe Gly Ala Val Val His Gly Gly Gly Asp $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Asp Glu Val Val Ser Ser Ser His Asn Ser Val Arg Lys Asp Ala Asp 100 105 110

Pro Ser Ala His Ala Glu Val Thr Ala Ile Arg Gln Ala Cys Lys Lys 115 120 125

Leu Gly Lys Thr Ser Leu Ala Gly Cys Glu Ile Tyr Thr Ser Cys Glu 130 135 140

Pro Cys Arg Cys

145

- (2) INFORMATION FOR SEQ ID NO:4257:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 107 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..107

(D) OTHER INFORMATION: / Ceres Seq. ID 1580063
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4257:
Met Glu Ser Pro Pro Asp Gln Ala Ala Ala Ala Ala Ala Arg Gln Asp
1 5 10 15

Lys Glu Gln Arg Asp Tyr Arg Leu Ile Ala Lys Ala Val Asp Glu Ala 20 25 30

Tyr Arg Ala Val Glu Cys Asp Gly Gly Gly Tyr Pro Phe Gly Ala Val 35 40 45

Val Val His Gly Gly Gly Asp Asp Glu Val Val Ser Ser His Asn 50 55

Ser Val Arg Lys Asp Ala Asp Pro Ser Ala His Ala Glu Val Thr Ala 65 70 75 80

Ile Arg Gln Ala Cys Lys Lys Leu Gly Lys Thr Ser Leu Ala Gly Cys 85 90 95

Glu Ile Tyr Thr Ser Cys Glu Pro Cys Arg Cys 100 105

- (2) INFORMATION FOR SEQ ID NO: 4258:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 242 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..242
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580068
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4258:

teacgaegtg egeetetggg acetggaege egargggte gegaegtget getegeetae 60 geggaregeg tkeggeaact eggggareae eetgeggtge agtatgttea ggtgtttaag 120 aaceatgggg eatetgetgg agettegatg gegeatteae acageeaaat gttgggaact 180 eeetttgtee eteectetgt tacaactegg ettaactgea tgaaggagat ttttgaeaga 240 te

- (2) INFORMATION FOR SEQ ID NO: 4259:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 80 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..80
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580069
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4259:

Ser Arg Arg Ala Pro Leu Gly Pro Gly Arg Arg Xaa Gly Arg Asp Val 1 5 10 15

Leu Leu Ala Tyr Ala Xaa Arg Xaa Arg Gln Leu Gly Xaa His Pro Ala 20 25 30

Val Gln Tyr Val Gln Val Phe Lys Asn His Gly Ala Ser Ala Gly Ala 35 40 45

Ser Met Ala His Ser His Ser Gln Met Leu Gly Thr Pro Phe Val Pro 50 55 60

Pro Ser Val Thr Thr Arg Leu Asn Cys Met Lys Glu Ile Phe Asp Arg 65 70 75 80

- (2) INFORMATION FOR SEQ ID NO: 4260:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 73 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..73
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580070
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4260:

His Asp Val Arg Leu Trp Asp Leu Asp Ala Xaa Gly Val Ala Thr Cys $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Cys Ser Pro Thr Arg Xaa Ala Xaa Gly As
n Ser Gly Xaa Thr Leu Arg 20 25 30

Cys Ser Met Phe Arg Cys Leu Arg Thr Met Gly His Leu Leu Glu Leu 35 40 45

Arg Trp Arg Ile His Thr Ala Lys Cys Trp Glu Leu Pro Leu Ser Leu 50 55 60

Pro Leu Leu Gln Leu Gly Leu Thr Ala 65 70

- (2) INFORMATION FOR SEQ ID NO: 4261:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 39 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..39
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580071
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4261:

Met Phe Arg Cys Leu Arg Thr Met Gly His Leu Leu Glu Leu Arg Trp $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Arg Ile His Thr Ala Lys Cys Trp Glu Leu Pro Leu Ser Leu Pro Leu 20 25 30

Leu Gln Leu Gly Leu Thr Ala

- (2) INFORMATION FOR SEQ ID NO: 4262:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 407 base pairs
 - (B) TYPE: nucleic acid(C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..407
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580072
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4262:

aaaatatata cagaacagca tcaactcttc gactgcgca gtaacgtatt gccccgcgtg 60 tgcgttaatc tggcagtgtc ggcgcagcac aagttcggga tcaactacgg gcagatcgcg 120 aacgactcc cggagccggc gcaggtggcg acgctcctgc agtcgatggg cgtgaacaag 180 gtgaagctgt acgacgcga cccccgggtg ctgacggcgt tcgccaacac gggcgtcggc 240 ttcaccatcg ccgtgggcaa cgaggacctg caggcgatgg cggccagccc ggacgcggcg 300 cgccgttggg tggcggcaa cgtgcagccc tacgtcccgg ccacgccat cacctgcgtc 360 accgtcggca acgaggtcct gtcggcaac gacacggcgg cgatggc

- (2) INFORMATION FOR SEQ ID NO: 4263:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 135 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..135
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580073
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4263:

Leu Pro Arg Val Cys Val As
n Leu Ala Val Ser Ala Gl
n His Lys Phe $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Gly Ile Asn Tyr Gly Gln Ile Ala Asn Asp Leu Pro Glu Pro Ala Gln
35 40 45

Val Ala Thr Leu Leu Gln Ser Met Gly Val Asn Lys Val Lys Leu Tyr 50 55 60

Asp Ala Asp Pro Arg Val Leu Thr Ala Phe Ala Asn Thr Gly Val Gly 65 70 75 80

Phe Thr Ile Ala Val Gly Asn Glu Asp Leu Gln Ala Met Ala Ala Ser 85 90 95

Pro Asp Ala Ala Arg Arg Trp Val Ala Ala As
n Val Gl
n Pro Tyr Val $100 \,$ $105 \,$ $110 \,$

Pro Ala Thr Arg Ile Thr Cys Val Thr Val Gly Asn Glu Val Leu Ser 115 120 125

Gly Asn Asp Thr Ala Ala Met 130 135

- (2) INFORMATION FOR SEQ ID NO: 4264:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 80 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..80
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580074
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4264:

Thr Ala Phe Ala Asn Thr Gly Val Gly Phe Thr Ile Ala Val Gly Asn $20 \\ 25 \\ 30$

Glu Asp Leu Gln Ala Met Ala Ala Ser Pro Asp Ala Ala Arg Arg Trp 35 40 45

Val Ala Ala Asn Val Gln Pro Tyr Val Pro Ala Thr Arg Ile Thr Cys
50 55 60

Val Thr Val Gly Asn Glu Val Leu Ser Gly Asn Asp Thr Ala Ala Met 65 70 75 80

- (2) INFORMATION FOR SEQ ID NO: 4265:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 466 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..466
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580088
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4265:

ccaccacacc tegtegegte gegtegteac eggegtgaag atggteggge caggeeteta 120 caccgagate ggcaagaaga ccagggatet getgtacaag gactaccaga etgaccacaa 180 gttcaccete actacctaca cetecaatgg egtegetgta actgetteta geacaaagaa 240 agetgaactg atcettggeg agatecaate acagataaag aacaagaaca tgaccataga 300 tgtgaaagca aacteggagt caaatatcat tacgacaatt actgttgatg agattgcaac 360 accagggetg aagaccatet taagetttge tgtteetgat cagagatetg gaaaaggttg 420 ageteemgta tttgeatgat tatgetggag ttaatgeaag categg

- (2) INFORMATION FOR SEQ ID NO: 4266:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 139 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..139
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580089
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4266:

Pro Ile Arg Arg Leu Pro Ile Ile Leu Pro Pro Asn Ser His Pro Ala 1 5 10 15

Ala Ser Pro Arg His His Thr Ser Ser Arg Arg Val Val Thr Gly Val

Lys Met Val Gly Pro Gly Leu Tyr Thr Glu Ile Gly Lys Lys Thr Arg
35 40 45

Asp Leu Leu Tyr Lys Asp Tyr Gln Thr Asp His Lys Phe Thr Leu Thr 50 55 60

Thr Tyr Thr Ser Asn Gly Val Ala Val Thr Ala Ser Ser Thr Lys Lys 65 70 75 80

Ala Asp Leu Ile Leu Gly Glu Ile Gln Ser Gln Ile Lys Asn Lys Asn 85 90 95

Met Thr Ile Asp Val Lys Ala Asn Ser Glu Ser Asn Ile Ile Thr Thr 100 105 110

Ile Thr Val Asp Glu Ile Ala Thr Pro Gly Leu Lys Thr Ile Leu Ser 115 120 125

Phe Ala Val Pro Asp Gln Arg Ser Gly Lys Gly 130 135

- (2) INFORMATION FOR SEQ ID NO: 4267:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 106 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..106
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580090
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4267:

Met Val Gly Pro Gly Leu Tyr Thr Glu Ile Gly Lys Lys Thr Arg Asp 1 5 10 15

Leu Leu Tyr Lys Asp Tyr Gln Thr Asp His Lys Phe Thr Leu Thr Thr 20 25 30

Tyr Thr Ser Asn Gly Val Ala Val Thr Ala Ser Ser Thr Lys Lys Ala 35 40 45

Asp Leu Ile Leu Gly Glu Ile Gln Ser Gln Ile Lys Asn Lys Asn Met 50 55 60

Thr Ile Asp Val Lys Ala Asn Ser Glu Ser Asn Ile Ile Thr Thr Ile 65 70 75 80

Thr Val Asp Glu Ile Ala Thr Pro Gly Leu Lys Thr Ile Leu Ser Phe 85 90 95

Ala Val Pro Asp Gln Arg Ser Gly Lys Gly
100 105

- (2) INFORMATION FOR SEQ ID NO: 4268:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 488 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..488
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580112
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4268:

acaagcacaa agagaggccc cgaccgcgat ggatcgtcag cgacagaccg accgtgacac 60 120 agccaacaac taacacgcac gcgcgcgaga gagaaagaga gctgcccggg agagagagag agaggaaatc aaacgaaggc gacgacgtac ggagacggca tggccgatca ccaccaccac 180 240 caccaccacg ggcatccgcc ggacgggccc ggcggcgcgg gggaccagct ggaggtaatc 300 aaggagcagg accggctgct gcccatcgcc aacgtcggcc gcatcatgaa gcagatcctg 360 ccgcccaacg ccaagatctc caaggaggcc aaggagacga tgcaggagtg cgtgtccgag ttcatcagct tcgtcacggg cgaggcctcc gacaagtgcc acaaggagaa gcgcaagacc 420 gtcaacggcg acgacgtctg ctgcgccttc ggcgcgctcg gcttcgacga ctacgtcgac cccatgcg

- (2) INFORMATION FOR SEQ ID NO: 4269:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 162 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..162
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580113
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4269:
- Lys His Lys Glu Arg Pro Arg Pro Arg Trp Ile Val Ser Asp Arg Pro 1 5 10 15

Thr Val Thr Gln Pro Thr Thr Asn Thr His Ala Arg Glu Arg Glu Arg 20 25 30

Glu Leu Pro Gly Arg Glu Arg Glu Arg Lys Ser Asn Glu Gly Asp Asp 35 40 45

Val Arg Arg Arg His Gly Arg Ser Pro Pro Pro Pro Pro Pro Arg Ala
50 55 60

Ser Ala Gly Arg Ala Arg Arg Arg Gly Gly Pro Ala Gly Gly Asn Gln 65 70 75 80 Gly Ala Gly Pro Ala Ala Ala His Arg Gln Arg Arg Pro His His Glu

Ala Asp Pro Ala Ala Gln Arg Gln Asp Leu Gln Gly Gln Gly Asp
100 105 110

Asp Ala Gly Val Arg Val Arg Val His Gln Leu Arg His Gly Arg Gly 115 120 125

Leu Arg Gln Val Pro Gln Gly Glu Ala Gln Asp Arg Gln Arg Arg 130 135 140

Arg Leu Leu Arg Leu Arg Arg Ala Arg Leu Arg Arg Leu Arg Arg Pro 145 150 155 160

His Ala

- (2) INFORMATION FOR SEQ ID NO: 4270:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 109 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..109
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580114
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4270:

Met Ala Asp His His His His His Gly His Pro Pro Asp Gly 1 5 10 15

Pro Gly Gly Ala Gly Asp Gln Leu Glu Val Ile Lys Glu Gln Asp Arg
20 25 30

Leu Leu Pro Ile Ala Asn Val Gly Arg Ile Met Lys Gln Ile Leu Pro 35 40 45

Pro Asn Ala Lys Ile Ser Lys Glu Ala Lys Glu Thr Met Gln Glu Cys 50 55 60

Val Ser Glu Phe Ile Ser Phe Val Thr Gly Glu Ala Ser Asp Lys Cys 65 70 75 80

His Lys Glu Lys Arg Lys Thr Val Asn Gly Asp Asp Val Cys Cys Ala 85 90 95

Phe Gly Ala Leu Gly Phe Asp Asp Tyr Val Asp Pro Met 100 105

- (2) INFORMATION FOR SEQ ID NO: 4271:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..435
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580115
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4271:

gacaagcaga gtcgcggcgg ccgaaccgcc acctccttt gcgcctcact catcagtcat 60 ggcgtcgctg ccgcctggac ctccggcgtg gtcggtgac ctgagcctaa ggcaccgtgg 120 cgggctggag atccgtgcc ccgcggagaa cttgctcca gggtgggcc gcggcggga 180 gcgcatgtc ctcctgctcc gcctccgccg ctgcctcctc ctctccgtca catcaattg 240 cggcggtcgt ccgcgggga ccacacagcc cgggccgcc ccgcgggaa gcagggtcgt gcgcgggca ccccatttg gaggcgcaag 360 aaacagccc cggcgcgc ccgcgtgccg ccggactgcc gggaccagcg gagtcgaacg ctggcgcgc ctgtc

- (2) INFORMATION FOR SEQ ID NO:4272:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 145 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..145
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580116
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4272:

Asp Lys Gln Ser Arg Gly Gly Arg Thr Ala Thr Ser Leu Cys Ala Ser

Leu Ile Ser His Gly Val Ala Ala Ala Trp Thr Ser Gly Val Val Gly

Asp Pro Glu Pro Lys Ala Pro Trp Arg Ala Gly Asp Pro Cys Arg Arg 35 40 45

Gly Glu Leu Ala Pro Arg Val Gly Pro Arg Arg Gly Ala His Val Pro

55 50 Pro Ala Pro Pro Pro Pro Leu Pro Pro Pro Leu Arg His Ile Gln Leu 70 75 Arg Arg Ser Ser Arg Gly Asp His Thr Ala Arg Ala Ala Ala Arg 90 Gln Gln Gly Arg Pro Leu Pro Ala Glu Gln Val Gly Ala Ala Ala Ala 100 105 Gly Thr Ser Ile Trp Arg Arg Lys Lys Gln Pro Pro Ala Arg Ala Ala 120 Val Pro Pro Asp Cys Arg Asp Gln Arg Ser Arg Thr Leu Ala Arg Pro 130 135 Val 145 (2) INFORMATION FOR SEQ ID NO:4273: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 144 amino acids

- - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..144
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580117
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4273:

Thr Ser Arg Val Ala Ala Ala Glu Pro Pro Pro Pro Phe Ala Pro His 5 10

Ser Ser Val Met Ala Ser Leu Pro Pro Gly Pro Pro Ala Trp Ser Val 2.0 25

Thr Leu Ser Leu Arg His Arg Gly Gly Leu Glu Ile Arg Ala Ala Ala 40

Glu Asn Leu Leu Pro Gly Trp Gly Arg Gly Glu Arg Met Ser Leu 55 60

Leu Leu Arg Leu Arg Cys Leu Leu Ser Val Thr Ser Asn Cys 70 75

Gly Gly Arg Pro Ala Ala Thr Thr Gln Pro Gly Pro Pro Pro Arg Gly 90 85

Ser Arg Val Val Arg Phe Leu Arg Ser Arg Trp Ala Arg Leu Pro Arg 105 110 100

Ala Pro Pro Phe Gly Gly Ala Arg Asn Ser Pro Arg Arg Ala Pro Pro 125 115 120

Cys Arg Arg Thr Ala Gly Thr Ser Gly Val Glu Arg Trp Arg Gly Leu 135 130

- (2) INFORMATION FOR SEQ ID NO: 4274:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..125
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580118
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4274:

Met Ala Ser Leu Pro Pro Gly Pro Pro Ala Trp Ser Val Thr Leu Ser 10

Leu Arg His Arg Gly Gly Leu Glu Ile Arg Ala Ala Glu Asn Leu 25

Leu Pro Gly Trp Gly Arg Gly Glu Arg Met Ser Leu Leu Leu Arg Leu Arg Arg Cys Leu Leu Leu Ser Val Thr Ser Asn Cys Gly Gly Arg 55 Pro Ala Ala Thr Thr Gln Pro Gly Pro Pro Pro Arg Gly Ser Arg Val 75 70

Val Arg Phe Leu Arg Ser Arg Trp Ala Arg Leu Pro Arg Ala Pro Pro 90

Phe Gly Gly Ala Arg Asn Ser Pro Arg Arg Ala Pro Pro Cys Arg Arg 100 105

Thr Ala Gly Thr Ser Gly Val Glu Arg Trp Arg Gly Leu 115 120

- (2) INFORMATION FOR SEQ ID NO: 4275:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..379
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580119
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4275: aaggagegee tgatagteta egattacatg eegaacetga geatacaete teageteeat

60 gggcagcacg cggcggagtg caacctcagc tgggagagga ggatgaggat cgctgtggac 120 teegeggaag ggategeeta eetgeaceae agegegaege egeacateat eeacagagae gtgaaggcga gcaacgtgct cctggacgcc gacttccagg cgcgggtcgc cgacttcggc 240 300 ttcqccaagc tggtcccgga cggcgcgacg cacgtcacca caaggtgaaa ggcacgctgg ggtacctggc gccggagtac gcgatgctcg ggaaggcctc cgagagctgc gacgtcttca gcttcggggt cacgctgct

- (2) INFORMATION FOR SEQ ID NO: 4276:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..95
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580120
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4276:

Lys Glu Arg Leu Ile Val Tyr Asp Tyr Met Pro Asn Leu Ser Ile His 10

Ser Gln Leu His Gly Gln His Ala Ala Glu Cys Asn Leu Ser Trp Glu 25

Arg Arg Met Arg Ile Ala Val Asp Ser Ala Glu Gly Ile Ala Tyr Leu 40

His His Ser Ala Thr Pro His Ile Ile His Arg Asp Val Lys Ala Ser 55 60

Asn Val Leu Leu Asp Ala Asp Phe Gln Ala Arg Val Ala Asp Phe Gly 70 75 Phe Ala Lys Leu Val Pro Asp Gly Ala Thr His Val Thr Thr Arg

90

- 85 (2) INFORMATION FOR SEQ ID NO: 4277:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

60

120

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..125
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580121
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4277:

Gly Ala Pro Asp Ser Leu Arg Leu His Ala Glu Pro Glu His Thr Leu

1 10 15

Ser Ala Pro Trp Ala Ala Arg Gly Gly Val Gln Pro Gln Leu Gly Glu 20 25 30

Glu Asp Glu Asp Arg Cys Gly Leu Arg Gly Arg Asp Arg Leu Pro Ala

Pro Gln Arg Asp Ala Ala His His Pro Gln Arg Arg Glu Gly Glu Gln 50 60

Arg Ala Pro Gly Arg Arg Leu Pro Gly Ala Gly Arg Arg Leu Arg Leu 65 70 75 80

Arg Gln Ala Gly Pro Gly Arg Arg Asp Ala Arg His His Lys Val Lys 85 90 95

Gly Thr Leu Gly Tyr Leu Ala Pro Glu Tyr Ala Met Leu Gly Lys Ala 100 105 110

Ser Glu Ser Cys Asp Val Phe Ser Phe Gly Val Thr Leu 115 120 125

- (2) INFORMATION FOR SEQ ID NO:4278:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 86 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..86
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580122
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4278:

Met Pro Asn Leu Ser Ile His Ser Gln Leu His Gly Gln His Ala Ala
1 5 10 15

Glu Cys Asn Leu Ser Trp Glu Arg Arg Met Arg Ile Ala Val Asp Ser
20 25 30

Ala Glu Gly Ile Ala Tyr Leu His His Ser Ala Thr Pro His Ile Ile 35 40 45

His Arg Asp Val Lys Ala Ser Asn Val Leu Leu Asp Ala Asp Phe Gln 50 55 60

Ala Arg Val Ala Asp Phe Gly Phe Ala Lys Leu Val Pro Asp Gly Ala 65 70 75 80

Thr His Val Thr Thr Arg 85

- (2) INFORMATION FOR SEQ ID NO:4279:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 405 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (ix) FEATURE:
 - (A) NAME/KEY: -
 - (B) LOCATION: 1..405
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580127
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4279:

aatgcagagg tegegttgae ggcacaggaa geagcagcag agcaggecag gaacaagaac agcaatgaac tegeogcegg gegacgacgg eggeggeage gegeacgget tattegggte gggeggeate egegggtteg getaeggegt eggegtgtee ateggeatee teetggtgge

caccaccate gegetegeca tetaettetg caegegeace tecatgeeeg tgteegeege 240 egegeeageg eegeegege agggeggea egeegggegg ggeategaeg aggeeaeget 300 egaggegtte eeggeggtgg cetaegegga ggegaggaag geggeggega aceaggegtg etgetgeeee gtetgeeteg agtgetaegg egaeggegae gtggt

- (2) INFORMATION FOR SEQ ID NO:4280:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 135 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..135
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580128
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4280:

Asn Ala Glu Val Ala Leu Thr Ala Glu Glu Ala Ala Ala Glu Glu Ala 1 5 10 15

Arg Asn Lys Asn Ser Asn Glu Leu Ala Ala Gly Arg Arg Arg Arg 20 25 30

Gln Arg Ala Arg Leu Ile Arg Val Gly Arg His Pro Arg Val Arg Leu 35 40

Arg Arg Arg Val His Arg His Pro Pro Gly Gly His His Arg

Ala Arg His Leu Leu Leu His Ala His Leu His Ala Arg Val Arg Arg 65 70 75 80

Arg Ala Ser Ala Ala Ala Gly Arg Arg Arg Ala Gly His Arg
85 90 95

Arg Gly His Ala Arg Gly Val Pro Gly Gly Gly Leu Arg Gly Glu 100 105 110

Glu Gly Gly Glu Pro Gly Val Leu Leu Pro Arg Leu Pro Arg Val 115 120 125

Leu Arg Arg Arg Arg Gly
130 135

(2) INFORMATION FOR SEQ ID NO: 4281:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 113 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: peptide
 - (B) LOCATION: 1..113
 - (D) OTHER INFORMATION: / Ceres Seq. ID 1580129
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4281:

Met Asn Ser Pro Pro Gly Asp Asp Gly Gly Ser Ala His Gly Leu

1 5 10 15

Phe Gly Ser Gly Gly Ile Arg Gly Phe Gly Tyr Gly Val Gly Val Ser

Ile Gly Ile Leu Leu Val Ala Thr Thr Ile Ala Leu Ala Ile Tyr Phe 35 40

Cys Thr Arg Thr Ser Met Pro Val Ser Ala Ala Ala Pro Ala Pro Pro 50 60

Arg Gln Gly Gly Asp Ala Gly Arg Gly Ile Asp Glu Ala Thr Leu Glu 65 70 75 80

Ala Phe Pro Ala Val Ala Tyr Ala Glu Ala Arg Lys Ala Ala Ala Asn 85 90 95

Gln Ala Cys Cys Cys Pro Val Cys Leu Glu Cys Tyr Gly Asp Gly Asp 100 105 110

Val